EDITORIAL

Taking the arduous first step towards a research project

Anyone who has ever embarked on a research journey would attest to the grim reality of the "self-doubt demon" one has to defeat while taking the first step towards a research project. The world is full of researchable problems and often we are not on top of the knowledge game in any of those areas. So, the first question that would (and I believe that ought to) come to haunt us at the start of the journey is: "Where should I begin my inquiry?" – and the corollary to that would be "Am I capable of doing this research?". Welcome to the world of research!

Have you ever heard of the Persian proverb "doubt is the key to knowledge" or Socrates' famous statement of epistemic self-doubt, "I know that I know nothing"? In my opinion, this is the best position you could ever be when you start on your research endeavour. Know that you know 'nothing' about something and make it your mission to know 'something' about it. I hope you've been following this line of thought?

Once you have your feet firmly on this initial stage, then start reading about the topic area or the theme within the broad discipline. Make sure that you devour most recent academic works on the area. Read journal articles and scholastic books that address the core concepts in the area. There is no need to fixate on a topic or a problem at this stage. Having a reasonable grasp on the most salient ideas and academic positions within the discipline area helps you to start synthesising those ideas in your mental crucible. My advice to you here is; doubt and question everything you have read up to this stage. Ask yourself the most difficult, ludicrous and whacky questions. Be thirsty and impatient to know 'something more' on the topic area.

Now that you have some background knowledge about the research problem and have also worked out some 'gaps in your own knowledge', this is the point at which you start looking for actual 'gaps in knowledge' in the discipline. At this stage your further reading, thinking and discussions with others must be all geared towards identifying a non-trivial gap in human knowledge that you can hopefully fill in through a research project. Although you have achieved some mastery of the subject area by now, you must never let go of your self-doubt; but it is hoped that at this stage, you would be able to rein in 'your ignorance' of the subject matter towards the fortuitous moment of starting a research project. Voila! You have just taken your first step in your research journey.

Dr. Ahmed Shahid
Editor (VC Research Digest)

"Time isn't the main thing. It's the only thing."
– Miles Davis

Learning to Teach, Teaching to Learn: A Reflective Narration

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> *Three passions, simple but overwhelmingly strong, have governed my life: the longing for love, the search for knowledge, and unbearable pity for the suffering of mankind."*
>
> *Bertrand Russell*

The first time I had come across the above quote from the prologue of Bertrand Russell's autobiography was as I worked at a library, foraying into books and readings, both printed and online, on how significant, how remarkable, the human impact can be.

Growing up, I loved listening to my parents' stories on how life at our island was like, and for me, born and bred so far from this treasured home, these stories seemed magical; how different was life then, how different was life there. Now that I reflect on these experiences, such tales are perhaps the precursor to my love for history, arts, and literature. And this love, in turn, was nourished by my teachers of the subjects leading me to the above experience and perception towards learning, in a cozy, dusty, quiet library, beguiled by the words of Bertrand Russell and thinking: Who am I? What matters in my life? How do I love, know, and make an impact, however small that may be?

Such questions, such thinking, and any learning inspired from these led me on the path of teaching, a journey of inner-happiness, reflection, and continuous learning. A little bit of this and that, a pinch of mistakes and learning, together with the joy of sharing knowledge, love, and values, prompt me to be the teacher today, centering my teaching around three key strategies.

Firstly, to further the spirit of learning, I have found imparting new aspects in any subject to be a fundamental strategy. I have come to realise that any learning, if repetitive, can be dull and tiresome and creates no joy or pleasure. For example, in teaching and learning about the solar system, facts, and photos of the planets, however magnificent they may be, rarely elicit a sense of curiosity in most people as we have, over time, heard and seen these, many, many times. The solar system, and the universe in fact, however, are quite the opposite of dull. As in the Pale Blue Dot photograph, we are just a speck of blue in the vastness of space. How remarkable, how profound, how impactful can this insight be? And with such an attitude, learning about the solar system can be awe-inspiring. There is so much to learn, not just facts and photos, so much to hear and think about. And bringing such into class, any inspiring knowledge, can propel energy and great curiosity towards learning.

Secondly, I have learned that teaching with love is essential for any constructive, healthy class environment. Learning nourishes, and curiosity grows in the context of acceptance and appreciation. I have found that something as simple as that of a smile can reverberate such senses throughout the class. Maintaining a healthy rapport with students, knowing and referring to them by their name, focusing on class language of 'we', not 'you' likewise lead to a spirit of togetherness and feelings of being valued in class. And naturally, to appreciate any learning, feedback is of essence. Focusing on students' existing strengths and specific guidance on what is needed for progress plays a key role in developing a healthy student attitude towards learning.

The third and final strategy in my tale of teaching is that of clear, precise expectations. I have come to see that my expectations from students tend to align with their expectations of me, their teacher. For instance, where I expect my students to participate well in classes, I see that they too expect me to teach with interest. The more exciting and relatable classes and learning are, the better their participation is. In the same manner, just as I expect quality work from my students, I also need to ensure I fulfilled student expectations of clarity in lectures, content organisation, and questioning. And above all, if I wish for good mannerism in my students, that of respect, kindness, and diligence, I have discovered the best way to achieve it is to exhibit these myself. In a sense, a class is a mirror; I tended to receive what I give in.

This interpretation is my subjective, reflective tale of teaching, and in one, I hope, I continue to learn and grow. In all the allures and distractions of life, teaching remains for me something that encompasses all three passions of Bertrand Russell that had captivated me years ago. With learning to teach and teaching to learn, may we get to positively impact who we are and our community.

STATISTICAL BITES

Power analysis is directly related to tests of hypotheses. While conducting tests of hypotheses, the researcher can commit two types of errors: Type I error and Type II error. Statistical power mainly deals with Type II errors. It should be noted by the researcher that the larger the size of the sample, the easier it is for the researcher to achieve the 0.05 level of significance. If the sample is too small, however, then the investigator might commit a Type II error due to insufficient power.

Power analysis is normally conducted before the data collection. The main purpose underlying power analysis is to help the researcher to determine the smallest sample size that is suitable to detect the effect of a given test at the desired level of significance. The reason for applying power analysis is that, ideally, the investigator desires a smaller sample because larger samples are often costlier than smaller samples. Smaller samples also optimize the significance testing.

Source: https://www.statisticssolutions.com/statistical-power-analysis/

The Role of Classroom Size and Space in Delivering Effective Lessons in Primary Grades in the Schools in Male'

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Partnership among Schools in E-Learning Implementation: Implications on Elements for Sustainable Development

Siu Cheung Kong

ABSTRACT

The study looked into how school partnership generates benefit. It aimed to identify the structures of partnership among collaborating schools and to examine elements that can contribute to sustainable e-Learning development. Six cluster project cases were purposefully selected from an e-Learning pilot scheme in Hong Kong to investigate how school partnership functions in e-Learning implementation through semi-structured focus group interviews. The findings identified five types of partnership structures that were adopted by the six e-Learning cluster projects, namely, a traditional leader-centered team leadership; a fusion of traditional leader-centered and distributed team leadership; a distributed-coordinated team leadership; an intermediate form of distributed-coordinated and distributed-fragmented team leadership; and a duplicated distributed team leadership structure. Elements including mutual benefit, active school engagement with dynamic communication and interaction, reasonable team size, and co-building of online sharing platform for channeling ideas and actions efficiently are critical to keep e-Learning school partnership sustainable.

Read on...

Research background and problem statement

Maldivian classrooms' physical infrastructure, especially in the capital, Male', where space is a precious commodity, had prompted this study. The research question was, how do classroom size and space influence delivery of effective lessons in Primary schools in Male'. I have used constructivist theories of learning and Person Environment Fit Theory (Caplan, 1987), which focuses on the role of both the person and the environment in determining an individual's behavior or performance.

Social constructivist theories of learning highlight the essentiality of social interaction in promoting learning and thinking (Adams, 2006). Maldivian national curriculum and assessment framework (National Institute of Education, 2014) is designed to promote collaborative learning, where children work together to achieve shared goals. This requires explicit teaching of social skills, including problem-solving, decision-making, self-regulation, collaboration, leadership, teamwork, communication, creative and critical thinking, and learner autonomy for lifelong learning. For students to learn these skills, teachers need to organize the classroom layout and seating for students to interact with each other and for students to interact with the teacher collaboratively, at times working independently in small groups or working with the teacher in a small group.

Primary classrooms in Male' appear to be built to the same template and the same size, irrespective of the students' age, and the need for movement for small-group collaborative work. The classroom seating arrangement often depends on where the ceiling fans are located, and the glare on the classroom board, more than on the teacher's consideration of where the child needs to be seated. Classroom lighting, ventilation, fixtures, accessibility to learning resources, and sanitary facilities need to follow a concept of children's and the teacher's needs for a conducive learning environment to improve achievement. Ergonomic chairs, desks, elevators, automated door closures, and access to assistive technologies can address inequalities in learning access. Use of plants, inspirational displays and posters, and accessibility to resources can improve achievement and address socio-economic and gender inequities (Cheryan, et al, 2014)

The physical floor area of a typical classroom in Male' is approximately 22 by 24 feet or 528 square feet. The recommended number of students for a classroom of this size is 10 students for a primary classroom. For a maximum of 20 students per teacher, the recommended classroom size is 1029 square feet for primary classrooms and 1344 square feet for secondary classrooms (Tanner, 2000). However, presently 30 students sit in a classroom suitable for 10 students or fewer. Uncomfortable learning environments such as high temperatures, high noise levels, and overcrowding can cause interpersonal conflict and negatively influence socio-emotional behaviour and learning (Griffitt, 1971; Klatte, 2013).

The male to female ratio of student allocation to each class in upper primary and secondary schools also causes seating difficulties. In these year groups, boys sit on one side of the class and girls on the other. Moving either boys or girls to the opposite side means that the children moved will always sit at the back of the class. The classroom size also needs to consider additional space when boys and girls are seated together for group work (Tanner, 2000).

In a small overcrowded classroom, teachers cannot move between them to see children's progress or sit next to an individual child to provide individual support. Children cannot move their chairs further from the desk for physical comfort. There is not enough space between students' rows for them to easily move out without distracting other students. As they move, the scraping and pushing of chairs cause unnecessary disruptions and off-task behaviour.

Methodology

The study was qualitative research under the interpretivist approach. Samples included

students from Grade Four in ten primary schools in Greater Male' Area. Individual interviews were conducted with ten students from the ten primary schools, and two observations of classrooms were done in two schools.

Findings

There was no direct co-relation between seating arrangement and effective delivery of lessons based on what the children said. However, it was evident from students' interviews and observations, that classroom size and space had a direct relationship with students' academic achievement by affecting students' behaviour and hence, classroom management. Time wasted on managing the class was noted during observations which are also in line with the view of Wannarka & Ruhl (2008), as cited in Gremmen, van den Berg, Segers & Cillessen, 2016) and Ceryan.et al. (2014) which stated that ineffective physical classroom environment minimized time engaged on a task due to time spent on classroom management by teachers.

'...it doesn't really matter where you sit as long as you study...'

'Good grades have nothing to do with where I sit...'

' ... I like how my teacher has arranged the class. When they can't talk to each other much, I can concentrate on the lessons... '

10 – 12 minutes were spent on classroom management (Fieldnotes 1)

According to student beliefs, the majority of the participants preferred sitting in groups to sitting in rows and the seating position was not a major issue for the students as long as they could study. Wannarka & Ruhl (2008), as cited in Gremmen, van den Berg, Segers & Cillessen, 2016) states that sitting in groups facilitated interaction between peers as stated by the study participants.

'... how the teacher seated us is good for us... we are in three rows...'

' ... I don't mind... It's your attitude... if you want to study you will study...'

'... Even if you sit in the front, still they might not like the teacher, so I can't say ...'

'... I sit facing all my friends which makes me want to learn...'

'Doing group work is easier and fun for me.'

Saved time in getting into groups (Field notes 1 & 2)

According to literature, there is no ideal classroom arrangement (Gremmen et al. 2016), although students had highlighted their preference for sitting in groups during the interviews. The literature recommends teachers to arrange their classroom based on fit for purpose for the learning activity and to individual learner's needs (Fernandes, Huang, & Rinaldo, 2014; Gremmen, van den Berg, Segers, & Cillessen, 2016)

Conclusions

This research did not show a direct relationship between classroom size and seating arrangement or on effective delivery of lessons. Classroom size mattered due to the teacher's availability of access to students and in terms of classroom management. Few of the students find the classroom arrangement of teachers appealing, though some were unhappy. The study concluded that students preferred sitting in groups to other arrangements. It is recommended that pre-service training of teachers need to include certain hours of training for group composition and seating arrangements for different types of learning activities; how to use seating arrangements to minimize distractions and off task behaviour, as well as how to organize the classroom and learning spaces to create a comfortable and conducive learning environment., Observation of ineffective seating arrangements adopted by teachers indicate that this also can be included in continuous professional development training of novice teachers and those used to only lecture mode of teaching. Future research on investigating patterns of interaction in various seating arrangements would be worthwhile.

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Challenges Faced by Teachers in Implementing Inclusive Pedagogies in Key Stage 1 Classes in a Private School Located in the Capital City of Maldives

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Research background and problem statement

Despite the policies and plans developed by the Ministry of Education (MOE), implementation of inclusive pedagogies in Maldives pose many challenges for the teachers (Ministry of Education and Ministry of Higher Education, 2019). Therefore, much work needs to be done as today's inclusive classrooms are more diverse with unique learners, resulting in a more complex environment (Talmor, Reiter, and Feigin, 2005). In order to use inclusive pedagogies, teachers should have the correct belief, knowledge, and practice (Florian and Spratt, 2013; Rouse, 2008; Shulman, 2004).

The inclusive pedagogies conceptual framework (figure 1) supports the theory of Rouse, (2008) and Shulman, (2005; 2004; 1986). Thus, the study is specifically concerned with the main challenges faced in implementing inclusive pedagogies from key stage 1 class teachers in a private school in the capital city of Maldives, Male'.
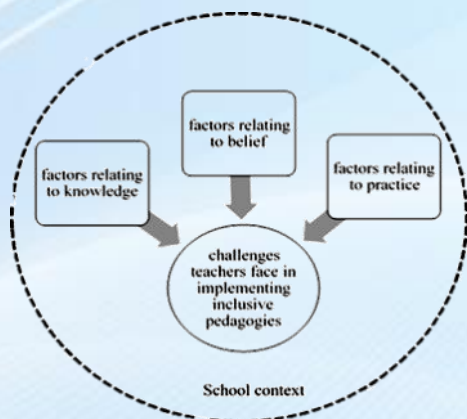
Conceptual framework (figure 1)

Research objective and questions

The main objective was to understand the challenges teachers face in implementing inclusive pedagogies in Key Stage 1 classes in a private school located in Maldives' capital city. The main question was the major challenges teachers face in implementing inclusive pedagogies in Key Stage 1 classes in a private school located in the capital city of Maldives are.

Methodology

This qualitative research approach aims to find in-depth information about the following issue and supports the subjective approach as it discovers different views of individuals providing multiple realities (Cohen, Manion and Morrison, 2007). Hence, this research focuses on a subjective paradigm (Pandey and Patnaik, 2014; Cohen, Manion and Morrison, 2007)

This study was conducted in a private school in Male' . I followed the British Educational Research Association (BERA), 2018, guidelines when considering ethical issues. Data for this study was obtained from primary sources using semi-structured interviews as the only data collection method, which followed the content analysis steps proposed by Taylor-Powell and Renner (2003).

Ten primary class teachers from Key Stage 1 were selected using purposive sampling (Silverman, 2010). With the participants' consent, all the interviews were audio-recorded and transcribed. Pilot tests and member checking were used to ensure the validity and the reliability of this research (Merriam, 1995, Cohen, Manion and Morrison, 2007). Through coding, findings are analysed into broader themes in relation to the conceptual framework and the research question.

Findings and Discussion

As Shulman (2004) explained, the connection of belief, practice, and knowledge to teaching and learning effectiveness. Therefore, the challenges found in this research will be presented based on factors relating to belief, practice, knowledge, and factors relating to the school context.

Factors relating to the belief

All the responses from the teachers supported the view of inclusion. However, challenges emerged from their fear of teaching in an inclusive classroom due to the lack of knowledge, practice, and management support. Similarly, these fears can influence the past experience in teaching students with special needs (Bandura, 1983). This study's findings directly echoed with other research, which explained ineffectively carried out teacher training programs as lacking in improving teachers' inclusive vision and attitudes (Ayvaz-Tuncel and Çobanoğlu, 2018; Amr *et al.*, 2016; Sharma *et al.*, 2013).

In fear of what that child might do, I have to think about these things when conducting some activities

honestly, with the current situation that I am in and the place that I am working in, I cannot say that I am very confident in my abilities

Factors relating to practice

Majority of the teachers highlighted workload as the most challenging, followed by a high student ratio. Many teachers also commented about the lack of resources to teach for all classroom types. A study conducted in the United Arab Emirates (UAE) by Anati and Ain (2012) explained the variables; lack of resources, knowledge, and support as factors that affect the inclusive implementations (Anati, 2013).

Also, a lot of unplanned activities and decorations are arranged by the school and we teachers have to be in all of those too

there are students with special abilities or special students, and there are no resources to carter for those learners

Factors relating to knowledge

As per the responses from the teachers, two main factors were presented relating to their knowledge. Most teachers stated challenges presented due to the ineffective pre-service training and lack of in-service training opportunities to use inclusive pedagogies in the classroom. Moreover, these limited and ineffective professional development programs have failed to improve teachers' pedagogical knowledge, ultimately resulting in a lack of knowledge to teach effectively (Shareef, 2010; Nazeer, 2006).

...to tell the truth, from these 3 years working here as a teacher, only once we had a professional development day but involved too many unrelated activities

I don't think I have enough knowledge about the curriculum and policies.

So I don't think that any teacher from our school, including myself is that knowledgeable or will be able to cope up with inclusion or inclusive education classes

School context

A high ratio of teachers stated the difficulty of school infrastructure due to the lack of space to cater to many students. Moreover, school infrastructure is a notable challenge in many different Maldivian schools (Shareef, 2010). The majority also stated ineffective leadership and the school's management that limited the good practice and improvement in teachers. In addition to this, human resource limitations presented in the school, which declined the support teachers needed.

I was very demotivated during the year because I have been asked to teach like this only, focus on the academics only, not the other skills that I want to improve

... also the classroom size itself, does not allow us to actually keep students in groups. we have to arrange then in rows just like in college

Conclusion

Findings revealed significant challenges teachers faced are due to insufficient knowledge and skills, ineffective management and leadership, lack of support, limited resources and facilities, the difficulty of school infrastructure, teacher workload, and human resource limitation. Hence, this research identifies some scope for the betterment of the education system in the Maldives. Further studies can enlighten this issue with an investigation about the challenges presented in both government and private schools regarding inclusive education.

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ABSTRACT

Over twenty million students enroll in undergraduate programs in the United States every year and nearly three quarters of a million graduate with a science or engineering major according to the National Science Board. A large number of these students now engage in scientific research. They are the foundation of the research, development, and education workforce of tomorrow. Early involvement in the process of scientific inquiry will not only boost their future career potential, but also enable them to develop valuable life skills relevant to any professional career of their choice. At a time when scientific facts have come under attack in civic discourse, the importance of understanding how science works is more important than ever for well-informed citizenship. Students aspiring to do research often have to take the important step of finding an advisor, who can help them choose a suitable research topic and apply for financial support, especially during summer. This involves making several important considerations which can be intimidating for anyone without experience. Some practical advice on the process of finding a research position and being successful in it may be useful and timely. In this article, I discuss a range of issues relevant to aspiring undergraduate researchers and offer practical advice for adopting practices that will help prepare them for the challenges of pursuing scientific inquiry. Although written with natural sciences students in mind, much of this advice is universally applicable and therefore also suitable for those in other disciplines.

Read on...

Ethical Challenges for Psychologists Working in the Maldives: A Critical Reflection

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Introduction

In small communities such as the Maldives, where people know each other and are connected through different relationships; confidentiality, and objectivity between clients and counselors can be hard to maintain. This article is a critical reflection on the process of identifying potential threats to ethical psychological care. It is hoped that this article will help in generating ethical conversations among the health care providers and become more conscious about the issue.

Possible Ethical Issues for Practicing Psychologists

Dual Relationships

Dual relationships, also known as multiple relationships, are when a professional working in the mental health field is approached by a person with whom they have a different role. For example, assuming Adult A is the counselor, and Adult B is the client, if Adult A's child and Adult B's child were friends, it would mean that both Adult A and Adult B have a different client-counselor role. In a study done by Imig, all the participants believed that an "essential part of being a rural counselor entailed wearing many hats" (2014, p. 407).

The American Psychological Association's Ethical Principles of Psychologists and Code of Conduct (2017) states that multiple relationships are discouraged. It could impair the psychologist's objectivity and efficacy, putting the clients in a compromising position. However, these dual relationships cannot be avoided. It also mentions that if these relationships exist, it may lead to the clients' exploitation; this is the main reason why dual relationships are considered unethical. In the Maldives, it can be safe to say that multiple relationships occur only because it is unavoidable; too many people want therapy, and there are a few therapists who can provide service. Along with this, most individuals who live in these small communities are intertwined through family, marriage, work, and school, causing them to have multiple additional relationships within the community, excluding the client-counselor relationship.

Confidentiality and Privacy Issues

The first and most important ethical issue that arises from dual relationships is maintaining confidentiality. Dual relationships are mostly recognized in rural practice making privacy and anonymity an issue for both the client and the psychologist. The danger of not having confidentiality can get magnified if the community already has a stigmatized view of therapy and mental health (MacDonald, 2015). Despite the client knowing instances where their confidentiality can be breached, there is information such as who they are that plausibly cannot be confidential especially in a small community.

Due to this, rural practice can cause trust issues between the client and the counselor. Trust between the client and counselor is a necessary part of the therapeutic process, and this is compromised because there are not enough counselors for everyone's preference. However, a study done by Helbok et al. (2006) found that client confidentiality was breached more in urban settings rather than the assumed rural settings. Burgard (2013) believes that this is due to colleagues' absence to discuss cases with and the more extensive awareness of others possibly finding out who the information is about. The stigma against mental health is more prevalent in rural areas than in urban areas (Lyons et al., 2014; Stewart et al., 2015), therefore if anyone is exposed to getting treatment for mental health issues, they may be ostracized, which goes against the ethical principle of non-maleficence.

Boundary Issues - Personal vs Professional

There will be a more considerable emphasis on the boundaries, as the sessions should remain professional at all times. When clients and counselors are put in situations where their personal lives overlap, there can be opportunities for confusion to flourish and negatively impact the therapeutic process (Goodine, 2017). This can be because practitioners who work in small communities or rural areas cannot always be off-duty since they live close to their

clients (Galambos et al., 2006). The societal expectations for interactions that people have in communities can cause the clients to have a false understanding of appropriate situations.

Furthermore, in this age of technology, both clients and counselors will inevitably cross paths online. Many counselors and therapists now offer online sessions and have an online presence on social media. Reamer (2017) indicates that digital communication and online therapy are the potential challenges it brings to therapeutic boundaries. The client or the counselor might find themselves searching for each other's online presence, leading them to use the information on these websites and apps in exploitative or inappropriate ways.

Conclusion

When a few psychologists can provide services, and many people need the services, it is inevitable for them to produce more than one relationship than the professional client-counselor relationship. Other ethical issues include difficulty maintaining the confidentiality of the clients and the blurring of boundaries between the personal and professional. All these issues are to be expected in smaller communities and should be attempted to avoid or minimize boundary overlaps.

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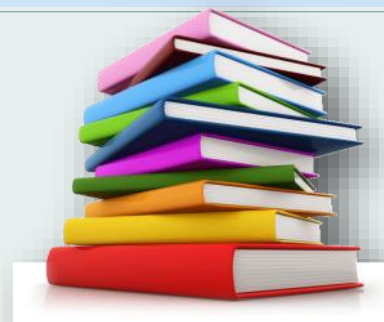
FROM THE WORLD OF RESEARCH

Games Literacy for Teacher Education: Towards the Implementation of Game-based Learning

Si Chen, Sujing Zhang, Grace Yue Qi, and Junfeng Yang

ABSTRACT

Game-based learning (GBL) has been widely recognised in research, and evidently benefited for learners. However, what GBL is perceived by teachers and learners has been a concern that might impact on quality of teaching and learning in the GBL environment. Game-based pedagogy meticulously designed from a teacher's perspective was regarded as harping on the same string without fun by learners. This paper aims to explore games literacy capabilities in supporting teachers to implement GBL that meets learners' needs and expectations. Semi-structured interviews and surveys with experienced teachers of GBL and experts in the relevant field were conducted, followed by an Analytic Hierarchy Process seeking perceptions of a group of academics and researchers. Findings suggested five key capabilities in game literacy required by teachers in implementing GBL. They are (1) basic games literacy, (2) high-level games literacy, (3) instructional design for GBL, (4) organisation and management for GBL, and (S) evaluation of GBL. Amongst the five, instructional design for GBL and high-level games literacy were rated highly impacting on the quality of teaching. Based on the findings, aiming at informing teacher education and professional development, we proposed a framework providing a guidance to improve game-based design and pedagogical practices for teachers in the implementation of GBL in their classrooms. It concludes that teachers' capabilities in games literacy require specific attention to instructional design – that demands a thought-provoking process for GBL.

Read on...

https://www.jstor.org/stable/10.2307/26921135

Sources of Negative Emotions and the Resultant Counter-Productive Work Behavior – Moderating Effect of Control Perceptions

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Research Background and Problem Statement

Deviant workplace behavior or counter-productive workplace behavior is one of the emerging critical issues organizations face worldwide. There is a big role emotion play in guiding these behavioral outcomes. The study on the role of emotions has been a hot research area over the last two decades. Studies have interesting links between negative emotions and the resultant counter-productive work behavior (CWB) (Chappel & Martino, 2006). While studies have identified the emotional factors that could drive negative emotions in an organizational setting, many look contextual. This has led to many studies focusing on discrete negative emotions in the workplace (Levine et al, 2011) (Bauer & Spector, 2015).

Negative emotions could be interpersonal conflicts with the supervisors, peers, or subordinates. These outcomes lead to inter-role conflict, family-work interference, and emotional strain. This results in negative emotions such as anger, sadness, fear, or frustration no longer being suppressed, and those emotions directing people's thinking and behavior negatively affect performance. Therefore, counter-productive work behavior is often described as highly costly and dangerous for organizations (Ehigie & Hameed, 2020). As a result, negative emotions must be managed proactively in order to de-escalate them and their resulting negative outcomes while leveraging them for positivity.

Literature Review

What are negative emotions?
Negative emotions are described as any feeling, which causes misery and sadness. Emotions that can become negative are hate, anger, jealousy, and sadness. These emotions dampen enthusiasm, make individuals dislike themselves and others, and reduce their confidence, self-esteem, and general life satisfaction. (Mental Health Foundation, Australia, 2020)

How do employees handle negative emotions?
According to a Harvard Business Review 2019 publication, research has found that people tend to regulate their emotions in two ways: suppression or reappraisal.

- Suppression is the popular strategy where people hide their feelings and pretend not to feel upset. Despite the fame, this strategy's outcomes are counter-productive and lead to immediate and longer-term negative outcomes.

- Reappraisal, or reassessing an emotional situation, the lesser-used strategy, is the most effective strategy among the two. It gives the person time to evaluate and calm down before dealing with the issue on hand. (Seppälä & Bradley, 2019)

How do employers handle negative emotions?
According to Pearson (2017), most executives respond to negative emotions by pressuring employees to conceal the emotions, i.e. suppression, worrying that an 'uncorking' of emotions opens a gate to a flood of negative emotions. Another way is to redirect the disgruntled employee to the human resources department's attention to be dealt with.

Why dealing with negative emotions matter.
Emotions influence employee wellness and engagement and business outcomes such as productivity and profitability (Klotz, 2019) and influences employee satisfaction, burnout, teamwork, and even hard measures such as financial performance and absenteeism (O'Neill & Barsade, 2016). Further research shows that employees' moods, emotions, and overall dispositions impact variables such as job performance, decision-making, creativity, turnover, teamwork, negotiations, and leadership (Knowledge@Wharton, 2007). Furthermore, negative emotions also result in counter-productive work behavior such as decreasing effort or time at work, lowering performance or quality standards, or eroding commitment to their organizations (MIT Sloan, 2017). The way leaders handle these feelings can go a long way toward building or destroying a strong workplace climate and motivating or discouraging employees. It is, therefore, essential to understand negative emotions and how to deal with them effectively.

What is Counter-productive Work Behavior (CWB)?
In the e-book Handbook of Workplace Violence published in 2009, the concept of CWB is defined as intentional acts by employees that harm organizations or their stakeholders. Citing the work of Spector & Fox (2005), a similar definition of CWB was presented by authors Ehigie and Hameed (2020), where CWB is defined as intentional behaviors by employees that have the potential to harm an organization, its members, or both. Definitions others published bring focus on the intentionality on behalf of the employees in the engagement of CWB.

Control Perceptions concerning CWB
Control perceptions are factors that regulate and restrain the thought processes and behaviors of individuals. Spector, Fox, & Domagalski (2006) discussed individual's causal attributions as a control perception. This factor measures the likelihood of negative emotions and behaviors directed toward one's self due to internal attributions. Other factors researched are personality traits such as anger, negative affectivity, self-control, emotional stability, narcissism, agreeableness, self-esteem and anxiety. These traits that have demonstrated significant explanatory power of CWB are trait anger and self-control (Kelloway, Barling & Hurrell, 2006).

Organizational Citizenship Behavior (OCB) is another factor that acts as a control perception. Generally, OCB and CWB are negatively related; however, researchers Klotz and Bolino (2013) reported the weak relationship between these two variables. Furthermore, Emotional Intelligence (EI) is also considered as a control perception. Ehigie and Shohola (2020) presented the works of Uzoh and Anyikwa' (2014) where the finding indicated

a significant correlation between emotional intelligence and workplace deviance. From the results of Siu (2009), it was also reported that emotional intelligence has a significant inverse relationship with CWB.

Aims and Objectives

To identify the causes of negative emotions at work

To analyze the intensity of the causes of negative emotions

To identify the resulting counter-productive work behavior (CWB)

Research Question/Hypothesis

H01: There is no significant impact of the perceived stressors on the negative emotions

H02: There is no significant relationship between negative emotions and counter-productive employee behavior

H03: Control perceptions doesn't have a significant moderating effect on counter-productive employee behavior

Conceptual Framework
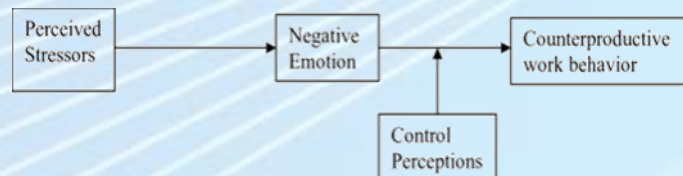
Adopted from Spector, & Miles (2001)

Methodology - Exploratory Sequential Mixed Method

An exploratory sequential mixed method will be used in this study. The initial qualitative research helps to get inputs on the key variables (perceived stressors) that could be used for further quantitative analysis. This will help understand the causes of negative mentions and check on the variables that could emerge and compare them with the variables gathered during the reviews. The qualitative part includes semi-structured interviews with identified target respondents who are likely to provide more information on the area. One leading teacher from 11 primary schools will be a part of the semi-structured interview process. Purposive sampling is scheduled for the qualitative method as it is important to get information from the sources who are aware of the study area. The qualitative approach focuses on developing a conceptual framework that is tested with statistical analysis on the data obtained from the quantitative research.

For quantitative data, the identified sample frame is approximately 300 primary school teachers (from the 11 primary schools in Male). The study targets 200 responses (Rao soft sample size calculator) through a structured questionnaire. The questionnaire will be administered through Qualtrics, which helps track the number of responses in real-time and come out with preliminary analysis - descriptive statistics. The questionnaire will be sent to teacher's official email address. The data collection will be carried out after getting the Ministry of Education's necessary permissions and ethics approval. In the inferential statistics, Multivariate statistical tools such as exploratory and confirmatory factor analysis and structural equation modelling will be used to test the model fit.

The research philosophy behind the chosen research design is a pragmatic approach as the study variables could be subjective and identified through interviews with selected respondents as there is a lack of research in the given geography. An inductive approach could help in developing meaningful hunches, which will be tested using statistical methods.

Expected Findings and Implications

The study outcomes will help school management understand the perceived stressors and their impact on counter-productive work behavior. This could help them to find ways to deal with those perceived stressors. From the teacher's perspective, this study will help understand the control perceptions that could significantly affect counter-productive work behavior. This could lay out ways for the teachers to effectively deal with the negative emotions and overcome the perceived stressors, yielding positive results in their performance.

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The Effects of the Inclusive Education Module on Primary Teaching Students at Villa College

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Research background and problem statement

In order to facilitate the achievement of objectives in the National Curriculum and Inclusive Education Policy of 2013, teacher training programmes need to bring about the necessary modifications to content and teaching methods and make arrangements required to produce teachers who can provide maximum assistance to the children with special needs, for them to reach their maximum potential. Efthymious and Kington (2017) stress on the great influence of teachers on special education needs students. Furthermore, teachers should have the potential to provide education to children with special needs and organize and conduct programs to learn life and work skills (Inclusive Education Policy, 2013).

There are several teacher training models, namely the Infusion model, the Collaborative Training model, and the Unification model. In the Infusion model, students take 1 or 2 courses that cover inclusive education. Many more courses deal with teaching inclusive classes in the Collaborative Training model, and mainstream teaching students and special education students do all or part of their practical experiences together. And in the Unification model, all students study the same curriculum that trains them for teaching mainstream education with a focus on pupils with special needs (Stayton and McCollun, 2002).

This study is done in Villa College, Faculty of Educational Studies, on students doing Bachelor of Primary Teaching, a 3-year programme, consisting of 24 modules and total of 360 credit points. The research is focused on a third-year module EDUC3006 Inclusivity in Education, taught in 36 contact hours and a credit of 15 points.

Aims and Objectives

This study aims to determine the effects and thus identify the usefulness of the inclusive education module taught to the Bachelor of Primary Teaching students at Villa College. The importance of evaluation and revision of modules by lecturers teaching the module, as stated by University of Reading (2016) has initiated this study. The study also intends to find the knowledge and attitude of the student teachers towards the module during various stages of the module to measure the effects of the module.

Research question

The questions that were explored in this study are: 1) What are the effects of the inclusive education module taught to the Bachelor of Primary Teaching students at Villa College? 2) What is the change in knowledge and attitude of the student teachers before, during and after the module 'Inclusivity in Education'?

Methodology

The study is qualitative research under the interpretivist paradigm. Random sampling was used, with a sample of 20 students selected randomly from the programme batchwise. Samples include 2 students from each batch. Face-to-face and telephone interviews were used as some of the participants were teaching in their islands. Document analysis was used, too, as evaluation reports of SETL (Student Evaluation of Teaching and Learning) filled by student teachers. The data from the interviews and documents were analysed using open coding.

Findings

The results showed that most students believed that the content was useful and the lessons were well planned. Some students recommended to include more opportunities for practically applying the theories, to make it more relevant to current practice.

On inquiring from the participants regarding their views at the initial stage of the module, the majority of them had predicted the module to be 'difficult'. However, few expected it to be 'interesting' and one as 'boring'. Their views regarding the concept of SEN had changed to become more positive as the teaching progressed.

"*We learnt how to cater to different students*"

"*... learning a lot of new theories*"

On completion of the module, the majority of the participants have stated that the module has benefitted them in general, by being able to identify and cater to different students, being more aware of the concept, knowing how to use available resources and also in dealing with students and their parents.

"*I find the new strategies very helpful now when I have to teach such students*"

Some students had requested practical sessions.

"*...meeting with such students' parents would have been a good idea.*"

"*...more advice from experts in SEN through workshops...*"

Conclusions

The main conclusion drawn from this study is that students gained information, knowledge, and awareness of inclusive education, which has proved helpful in their everyday teaching. Their main suggestion was to include more practical experiences within the module. They specified more interaction with parents of students with different abilities to be more informed about students' habits and routines. They also wanted sessions with experts in the fields, so that they could ask specific questions.

As time limitation is a major factor during the module, and every child is different, training needs to inculcate lifelong learning in student teachers. Thus, adequate staff training as highlighted by Zwane and Malale (2018) is needed for in-service teachers and sufficient professional development for inclusive education.

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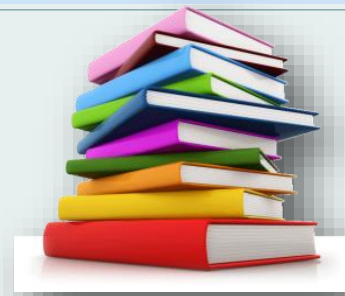
Want to submit an article to VC Research Digest?

We wish to publish at least one issue of VC Research Digest every two months. Hence, we invite all academics and students of Villa College to submit their papers/articles as soon as they are ready. There are no submission deadlines. We will review the submissions in the order they are received.

All submissions will be received through an online platform, as below.

Submissions to the VC Research Digest should meet the following guidelines:

- Be between 700-850 words in length

- If a completed research project, it must at minimum include:

    ◊ Research title

    ◊ Research background and problem statement (including lit. review)

    ◊ Aims and Objectives

    ◊ Research question/hypothesis

    ◊ Methodology

    ◊ Findings

    ◊ Conclusions

- If an ongoing research project, it must at minimum include:

    ◊ Research title

    ◊ Research background and problem statement (including lit. review)

    ◊ Aims and Objectives

    ◊ Research question/hypothesis

    ◊ Methodology

    ◊ Expected findings and implications

- Articles on research methods should focus on any one (or few) aspects of high quality research and provide in-depth and practical insights

- Contributors can also forward links or details of significant research articles published in refereed journals to be included in the Research Mesh section.

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Submit your papers/ articles by going to this link.

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FROM THE WORLD OF RESEARCH

Self-Regulated Learning for Web-Enhanced Control Engineering Education

Flavio Manganello, Carla Falsetti and Tommaso Leo

ABSTRACT

Web enhanced active learning has been demonstrated to be an effective approach in Engineering Higher Education, as it provides students with more flexibility in dealing with the development of skills related to professional knowledge. However, students require a sufficient level of self-efficacy and control over their own learning, which might impact negatively on their effort and academic performance. Therefore, promoting self-regulated learning among students would help them to develop effective strategies they could adopt in planning, monitoring and evaluating their learning process. In this paper, a web-enhanced active learning approach is proposed which integrates a self-regulated learning strategy that supports Control Engineering students in managing their learning process. In order to evaluate the effectiveness of the proposed approach, a three-year quasi-experimental study was performed in the context of an undergraduate Automatic Control course at the Università Politecnica delle Marche, Italy. This involved 418 students and 4 teachers. Both quantitative and qualitative measurement tools were used for the evaluation. The results of the study confirmed the effectiveness of a learning design specifically tailored to implement self-regulated learning features in a web-enhanced active learning approach for undergraduate engineering students. Moreover, the qualitative-quantitative evaluation model proved to be effective in capturing and gauging a more comprehensive and detailed picture of the triggered self-regulated learning dynamics.

Manganello, C., Falsetti, C., & Leo, T. (2019). Self-Regulated Learning for Web-Enhanced Control Engineering Education. Educational Technology & Society, 22 (1), 44–58.

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Somewhere, something incredible is waiting to be known.
- Carl Sagan

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