



Hospital Based Midwifery Training Model in Zimbabwe: Student Learning Approaches and Readiness

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Abstract

Introduction: All teaching and learning styles address how students view themselves as learners and their realisation of the learning experiences for skill development in the activities which define them.

Aim of Study: To explore the learning approaches of students on a hospital-based midwifery training model for better understanding of their learning needs and facilitate their readiness to competence and confidence development.

Methods: A qualitative approach hinged on Grounded theory design for exploring participants' characteristics, learning orientations and readiness through in-depth interviews.

Sampling Approaches: Data saturation was achieved with 30 Participants through purposive and theoretical sampling and theoretical sensitivity. Constant comparative analysis concurrent with data collection was used.

Findings: Emergent categories from the student narratives: "Being a Midwifery Student" the main category and "bio psychosocial characteristics", "time and being", "dexterity attainment promptness" and "learning orientation" as sub-categories.

Conclusion: The positionality of the teachers and learners, in particular the Bio Psychosocial Uniqueness, 'Time and Being', 'Dexterity Attainment Promptness' and 'Learning Orientations' facilitated development of an Individualistic- Collectivistic Learner Styles Typology.

Implications: Students are individuals who should be treated with respect and dignity irrespective of their gender and background to allow wholesome development of a qualified midwife.

Keywords: Learning Approaches; Learning Readiness; Midwifery Student; Hospital-Based Training Model

Abbreviations: ICM: International Confederation Of Midwives; CPD: Continuing Professional Development; MRCZ: Medical Research Council of Zimbabwe.

Introduction

Midwifery is a profession of midwives that combines science, art and ethical values drawn from disciplines such as medicine, psychology, sociology, pharmacology and

biochemistry among others [1,2]. The professional midwives practise within a framework of autonomy, partnership, and accountability under the flagship of the International Confederation of Midwives (ICM), a global body that sets midwifery standards of education and practice. The ICM introduced evidence-based standards for midwifery education and practice developed in 2010 and updated in 2021 [3]. These standards fundamentally emphasise the uniqueness of the midwifery profession. The ICM creates

linkages that permits knowledge exchange on matters of international importance to midwifery and reproductive health issues. One example is the updated essential competencies for basic midwifery practice: a framework for preparing a fully qualified midwife as an outcome of a competency-based midwifery education curriculum or programme. A fully qualified midwife is defined by the ICM as: “..... a person who has successfully completed a midwifery education programme that is are the foundation framework of the ICM Global Standards for Midwifery Education and is recognized in the country where it is located, who has acquired the requisite qualifications to be registered and/or legally licensed to practice midwifery and use the title ‘midwife’ and who demonstrates competency in the practice of midwifery” pp1.

Competence-based midwifery education programme primarily focuses on students acquiring and demonstrating all the ICM essential competencies for basic midwifery practice. Additionally, the programme ought to prepare students with a sound knowledge base for competent clinical practice, critical thinking skills and reflective practice [4]. Although a competency-based education defies a neat definition, it, however, must contain important identifiable elements [5], a nuance. Fullerton JF, et al. [6] assets that such elements must include learner engagement and direct involvement in all aspects of acquiring, developing, and refining the competencies needed to demonstrate practice of a midwifery discipline. The teaching and learning methodologies for the study programme are, therefore, to be designed in a way that facilitate the development and demonstration of competency [6]. Furthermore, for future sustainable competent midwifery practice, the programme should cultivate in its graduates a culture of being personally responsible for their own learning. Thus, the graduates are equipped to be able to advance into long-life learners for continuing professional development [CPD] for building a midwifery workforce capable of saving lives of women and new-borns threatened if not lost to pregnancy related complications [4]. Such complications and loss of live could be prevented if these mothers and there are looked after by well-trained midwives working in well supported with adequate material and human resources to address the women and their new-borns’ needs [7,8]. Though, the United Nations [9] attributes this catastrophe to both unmet needs of pregnant women and midwives’ skills to lack of recognition and priority in the endeavour of reducing maternal and child mortality. The UN [9] emphasises on fully investing in midwives’ strategy by 2035 that would avert roughly two-thirds of maternal, new-born deaths and stillbirths, saving 4.3 million lives per year. Future sustainable competent midwifery practice is a culture new graduates should value as a personal responsible for their own learning as they move into the profession through long-life learning.

Assuming responsibility for one’s own learning as an adult may not be easy to some programme graduates, especially if they have not yet understood the concept of continuing professional development (CPD). Despite such a challenge, CPD is a lifeline for midwives to remain relevant in the profession while safeguarding the health of the public irrespective of the pathway taken to become a midwife. There are three pathways to become a midwife at a global level: integrated nursing and midwifery; direct entry and midwifery post nursing [10]. The programmes vary in duration and are often offered as undergraduate programmes at higher education institutions. But generally, the integrated nursing and midwifery programme is 4 years; direct entry is 3 years and the duration midwifery post nursing 3 years nursing and one year midwifery. However, the ICM set a consensus standard of programme duration at 18 months for post nursing registration and 3 years for direct entry. All programmes involve theory and practicum units regardless of the duration and admit adults as students [11].

These adult learners do not come on to training programme as empty vessels. They bring their prior life personal experiences to the programme, a strong foundation upon which they change their thinking to become midwives. It is safe to assume that student midwives, as adults, come on to the programme highly motivated only needing guidance and interactive teaching and learning approaches or styles. Fullerton JF, et al. [11] views adult learning as life centred in which learning is by doing, by application and experience, and if need be by trial and error. This implies that adults are not only receivers of knowledge from the teachers/educators, but also ought to reflect on their own reality themselves and make decisions pertaining to their learning. This confirms to us how adults manage their learning processes including modification of their learning approaches or styles.

One of the characteristics of a competency-based midwifery education model is that it facilitates learning styles that allow students to learn in their preferred style. A learning style describes how a learner harvest, sifts through, interprets, organises, comes to conclusion while storing information for further use [12]. Evidence shows that about 89 percent of educators believe in matching instructions to a student’s preferred learning style [13]. The act of students developing own preferred styles of learning seemingly translates into concepts of self-motivation, self-directed, capability to learn and individualism A student without the capability to learn and/or demonstrate competence cannot complete a midwifery programme. Likewise, it is impossible to force any person to learn, so lack of motivation to learn most often results in learners dropping out of midwifery programmes, especially if they fear the responsibilities of being a practicing midwife.

Basically, learning styles are theories that seek to understand the processes and complexities involved in how students learn based on such factors as personal strengths, preferences and motivation. Some of the learning theories that midwifery educators can learn from as they prepare students in the learning environment include behaviourism, constructivist, and cognitivist, humanistic and social learning theories [14]. Each of these learning theories has specific characteristics that further define how individuals learn and have implications for how teachers can facilitate the teaching-learning process. Behaviourism style of learning concentrates on overt behaviours that can be observed and measured and it requires some type of stimulus for the learner to learn (respond) [15]. The stimulus may be a reward to the student by the teacher such as positive reinforcement or a positive mark. This form of learning is of value in a competency-based programme for skill development, especially in a practical laboratory setting. However, educators should consider that this style of learning is teacher-centred in that the teacher's interest is in the changes related to students' external behaviours that can be observed and measured in such as demonstration of specific midwifery skills. But it makes provision of behavioural objectives to instructional process [15].

Constructivism learning is interactive and requires that the students become active in building knowledge rather than just passively take information. It involves assimilation and accommodation processes. Assimilation process embraces new information and fits new information into existing schema while the accommodation process facilitates using newly acquired information to revise and redevelop and existing schema. Constructivism learning encourages students to think critically to determine how they will learn [16]. Thus, midwifery educators can facilitate critical thinking by asking students to give their plan of action with rationale before proceeding to conduct a health education session for expectant parents. Cognitivist learning is student-centred for it requires that students actively participate in their learning process. Its focus is on the conceptualisation of students learning process and on how students receive, organise, store and retrieve information [17]. Students use internal thought processes to discover new ways of using past knowledge and new knowledge to provide acceptable standard of midwifery care. However, the student may experience cognitive dissonance when something learned in the past does not fit with the current situation. This problem must be resolved before students continue with their learning using problem-solving skills. Doyle K, et al. [18] asserts that problem-solving is the process that begins with identifying the issue through observing what is going on in your environment. It also involves coming up with solutions, implementing those solutions and evaluating their impact [18,19]. Midwifery educators build upon students'

problem-solving skills by understanding how learners learn and applying problem-solving teaching approaches to create effective learning activities in clinical settings.

The humanistic teaching and learning theory suggests that learning occurs because the learner has a specific goal to learn and to fulfil one's potential in life such as becoming a qualified midwife. The learner has set a goal for learning and is supported in meeting that goal (self-actualization) by educators who facilitate acquisition of knowledge in a conducive learning environment. Humanism focuses the student as a whole and the theory has a strong focus on student's emotional wellbeing [20]. The learner is believed to be free-willed and capable of achieving set goals based on acting intentionally according to own personal values [21]. In contrast, the behaviourism believes that learning occurs only in response to external environmental stimuli or the cognitivist's belief which holds that discovering knowledge and constructing meaning from this discovery is central to learning. The social learning theory is based on beliefs that people learn from one another via observation, imitation, and modelling requiring attention, memory, and motivation. In many ways it is a combination of behaviourism, cognitivism/constructivism, and humanism. The social learning theory has not been explored for application to teaching and learning in midwifery education as educators have concentrated on the combination of the afore mentioned theories.

Competency-based midwifery education pay special attention to teaching and learning by domains of learning classified as cognitive (Knowledge), affective (attitudes) and psychomotor (skills) domains is emphasised [22]. Midwifery educators are expected to use a range of learning theories in their as facilitators of learning, depending on the domain of learning the level of the student (novice, advanced beginner) and the preferred learning style. These theories blend together and student midwives can select how to fit better into creating self-styled learning approach to use in practice to build competence and confidence while gaining experience in various learning environments. Student midwives' learning experience for clinical practice occurs in the workplace during their clinical placements under the supervision of senior midwives/mentors. It is expected that mentors will know and understand all types of learning theories and learning styles to be effective in their roles as clinical teachers. Learning in the workplace sets a relational pattern between the student midwives and their mentors and is rooted in their daily interaction with each other [23].

However, research has identified issues that have interfered with normal learning experiences of student midwives including strained relationships with their mentors, emotional demands, feeling alienated from mentors in clinical practice [24]. Essentially, student midwives are more engaged

when the mentorship is student-centred, characterised by nurturing and mutual respect between learners and mentors. Mentoring is a process whereby the student midwives are provided support, advice and knowledge which he/she needs for her/his personal and professional development [25]. It is a partnership built on trust and mutual accountability and responsibility between the student and the mentor. It creates opportunities for a supportive clinical learning environment, enhance acquisition of clinical skills and boost students' self-confidence [26]. A successful partnership can make a positive impact on the students' learning experiences during clinical placements [27]. The three domains ensure that all teaching and learning address how students view themselves as learners and their realisation of the learning experiences for skill development in the activities which define them as midwives.

Aim of the Study

The study aimed to explore the learning approaches of students on a hospital-based midwifery training model for better understanding of their learning needs and facilitate their skill development.

Objectives

- Explore characteristics of students on hospital-based midwifery training model.
- Explore learning approaches among students on hospital-based midwifery training model.
- Explore the learning readiness of students on hospital-based midwifery training model.

Research Setting

In Zimbabwe, midwifery education and training are hospital-based. This study took place in three Central Hospitals Maternity Departments and Schools of Midwifery serving as referral centres for high-risk maternity cases, attachment areas for midwifery and medical students. Students who enrol in the midwifery programme are selected from ten country province using the quota system, accounting for the background variation among students.

Research Methods

Research Design

A qualitative approach hinged on Grounded theory design for exploring participants' characteristics, learning orientations and readiness through in-depth interviews. This methodology allowed for specific ways of collecting data [28]; a key method being semi-structured interviews, which the researchers adopted for the present study.

Sampling Methods

The study participants were newly qualified midwives who had recently received Nurses' Council qualification examination results and their former supervisors. The nature of the study required two sampling approaches: the purposive and the theoretical sampling designs. The first participant was chosen purposively among the newly qualified midwives from Central hospital A and the rest of the participants were recruited into the study through theoretical sampling until saturation was achieved at the 30th participant; meaning that no new data was being generated from interviews.

Data Collection Procedures

Topic guides were used to focus in-depth interviews using two topic guides at the time convenient to the participant. One topic guide was for the newly qualified midwives and the other was for the student midwives' mentors from both the school and the clinical area [29,30]. The interview conversation direction was directed by the participant's responses related who they were, their learning promptness and orientation.

Analysis

Data collection and analysis occurred simultaneously through theoretical sensitivity and comparative analysis, after which the interviews were transcribed. The coding processes, constant comparison, memo writing, and theoretical sampling facilitated the emergence of a model "Being a Midwifery Student" which led to the development of a framework; Learning Style Typology [31,32].

Ethical Considerations

Ethics clearance was obtained from the Central Hospitals Institutional Review Boards and Medical Research Council of Zimbabwe (MRCZ). Consent was obtained from participants and no names were used on data collection instruments to protect participants' identity.

Study Findings

"Emergent categories from the analysis were: "Being a Midwifery Student" the main category and "bio psychosocial characteristics", "time and being", "dexterity attainment promptness" and "learning orientation" as sub-categories. These emerged from the students' qualitative narratives.

Being a Midwifery Student

Being a midwifery student is the main category with 'Bio Psychosocial Uniqueness 'Time and Being', 'Dexterity

Attainment Promptness' and 'Learning Orientation' as four sub-categories. These emerged when the students were describing their reasons for enrolling into the midwifery training programme, their characteristics, and their approach to the learning dynamics. The Bio Psychosocial Uniqueness: age, gender, social problems dynamics and the psychosocial support. 'Time and Being' emerged when participant (student) described his/her previous work position, related experience and relationship building during training. The 'Dexterity Attainment Promptness' emerged when the participants were describing the rate at which they assimilated the subject matter and acquired required midwifery competence skills. The final subcategory 'Learning Orientation' refers to students' learning styles.

Bio Psychosocial Uniqueness

The "Bio psychosocial Uniqueness" sub-set categories of dynamics related to students' gender, age, social problems, and psychosocial support. The gender variable appeared to be associated with certain student characteristics defining the nature of student- teacher relationships. Such characteristics: being inquisitive reflected through asking too many questions during a demonstration carried out by the mentor (synonymous with midwifery clinical instructor, supervisor, or educator). Being inquisitive during a demonstration seemed to be associated with being disrespectful, belittling the mentor and showing possession of superior knowledge compared to his/her the mentor especial one is a male. Consequently, exposing the male students to discrimination and verbal abuse which seemed to undermine their confidence, creating uncertainty, anxiety and confusion. In addition, to inhibiting a fruitful engagement and dialogue with their facilitators to enhance their learning. However, there is nothing of sort is associated with being a female midwifery student as one of the newly qualified male midwives chelesi said: 'I think students have to interact with the clinical instructors to benefit ... could not approach them I had a fear of victimisation The clinical instructors would say 'this one is a problem ... think they know too much'. Heard stories before that here at [name of hospital] if you keep on asking questions you will be victimised ... silly questions too many questions ...especially if you are male.' [Chelesi].

Age characteristic cut across both male and female students as well as their mentors classifying them into two definable age groups, namely the young and the old. These age variables sometimes created conflict or poor student-mentor relationships especially where the facilitator of learning is younger than the student. It appears that in this study, age is associated with the profession ethics where older students were already in a position of authority and expect respect from the younger supervisors. However, in this study it has been revealed that knowledge power is superior to

seniority power (Student Status Power' versus 'Supervisor Status Power') though both powers are age dependent. Where the supervisor is younger than the student, conflict and power dynamic may prevail with a negative impact on learning and teaching relationship and the environment in which learning take place. 'One of the problems which I have noticed... most of my clinical instructors are young ...most of students are older ...this age difference makes some of the students uncomfortable' [TCT1].

Tariro; the student in the old age group said "Just imagine your junior telling you what to do and insulting you...just because they did midwifery before you and you have no choice but to respect them....Since you need the midwifery diploma.... though with hard feelings.... despite your old age and position ... the younger ones...they do not care... they will ask where you were when us the young ones were training... it will be hurting ... you feel like beating them up or quit..." Nevertheless, the older students worked harmoniously with older supervisors appreciating teaching-learning relationships as revealed in the following remarks: Those older clinical instructors are very good they respect you Said Tariro

A young midwifery student in Zimbabwe is defined by age of below 30 years but above 23 years old implying the older is above 30years. However, it is common to find the student and the mentor in the same age group with no problems. In this study, being a young midwifery student was associated with lack of discipline including laziness, a care free attitude, and non-activity participation in skill development. Even when they were aware of their wrong doings as demonstrated in the following narratives by supervisor CIGA1 and newly qualified midwife Kudakwashe respectively...The young ones are always lazy and do not care about what is going on in the ward. They do not participate in activities meant to develop their skills... Like nowadays some of the students who come for midwifery training some of them are still young seem not to care about what happens to them they face it... be it discipline...unlike older ones who can be disciplined tolerate it... usually those below 30 years 25, 26 or23...' [CIGAI].

'I was the oldest...above 45 years old ...and they were three of us...We would sit down...cry... lament about the younger supervisors' disrespect, verbal abuse and shouting at us as old as we are...unlike the older ones...who would actually respect you...teach you nicely...had patience and were nice... I was slow to catch up.... took me almost 6months doing procedures wrongly.... It took me 23 practices to be able to do a correct abdominal examination...the younger ones took them only three times...' [Kudakwashe] The concepts of being responsible for one's own learning appears to be a critical adult characteristic of adult learners as it facilitates

motivation towards participating in activities which facilitate learning and grasping the requisite skills for the midwifery programme. Consequently, the level of responsibility and maturity among midwifery students seems to be associated with age. However, 'Being irresponsible and Being uncaring towards one's own learning' appeared to be characteristic among both the older and the younger students. Although there appeared to be a distinction between the younger and the older learners since in adult students it could be explained through social problems and lack of psychosocial support which was remedial when addressed unlike in the younger ones. Consequently, making it difficult dealing with younger students as revealed with one of the student midwives' mentors CIGAI in the following quote: Older students are responsible learners unlike younger ones, if you find older ones...not caring or being lazy or not participating in procedures to develop skills ...they would have social problems which need attention...usually they will be ok when the problem is solved ...' [GIGA1].

Psychosocial dynamics in learning-teaching midwifery skills concentrate on the nature of the student's self-understanding and social relationships. This also involves mental processes, patterned learning and mitigatory activities to promote and facilitate learning difficulties in midwifery competence development that support connections between the person's learning and teaching dynamics. These include students' self-peer understanding, identity in learning, and teaching methodologies and the psychosocial support offered across their training. As one student stated: '... maybe ... social problems or problems with clinical instructors which I have ... One of your family members is not feeling well ... You can't go home because you want to study with ... Colleagues ... but learning becomes difficulty.....if the problem is not solved. You can watch a procedure but not see what is happening and everything done remains new every day... As a group we could pray for each other...or collect money and help our fellow student to cover nagging problems to make them concentrate.....and benefit. We would be there for each other in times of illness and death of family members...and more social problems' [Kumbirayi].

Time and Being

In this study 'Time and Being' is a concept that describes students in terms of past time and present which includes who they were before enrolling into the midwifery programme. The concept defines the student behaviours, experiences with the learning environment including relationship building with supervisors and closely related to the age of characteristics. Time and being also influenced how their perception of self within the learning environment and associated challenges and conflicts and their resolutions. These perceptions affected the learning

and teaching environment and relationships in a negative way as revealed in the following discussion by Supervisors WSJSB1, CIGAI and newly qualified student Jani respectively in their following quotes

'Those who want signatures only... they have that mentality that I know everything because I was working in maternity ...before.... yet they forget they were just helping out because they did not have the knowledge on how to do the procedures and why they were doing it... When you assess them ... you find out they need more time... have difficulties in performing their tasks...' [WSJSB1]

'Usually, the problem comes with those who just want post-basic [qualification] for promotion not that they want to do it... they are forced... like in ZRP and ZDF... to change rank... hands on know nothing ...but it will be difficult to cope with the program ... but no choice.' [CIGA1]

"Some of the students are problematic, especially those who just want the certificate to climb the ladder at their workplace, the schools should have a selection criterion so that they chose those who would practice midwifery. After qualifications, for example, someone working in the office with ZRP or ZDF what do they want midwifery for? Instead of being problematic as they refuse to work and wait for examinations." [Jani].

Dexterity Attainment Promptness

One dimension of learning is about dexterity attainment promptness or the rate of grasping the experience and the associated modes to facilitate the attainment of knowledge and skills. In this study, mode of grasping and transforming experiences into knowledge or skills is called learning attainment promptness or the rate at which an individual grasp information or skills. As a result, two learning promptness styles were identified: slow learning and fast learning on a continuum meaning among several other styles could be found sitting on any part of the continuum between the slow and the fast learner.

A slow learner in midwifery is a student who has the capability to achieve all the essential midwifery skills but takes more time compared to other student's capabilities. Slow learners in midwifery require several repeated contacts with new procedures and mentors for meaningful learning to take place. This takes time and appears to be a problem for the facilitators as it has its own challenges for both the student and the facilitators. The slow learners needed both visual, verbal instructions at the same time after which the student is expected to practice to show proof of grasping. Hence critical for the mentors to acknowledge the differences for creating and encompassing environment for the two as revealed by mentor CIGAI and newly qualified midwife Mary subsequently.

'I was aware that there were those students who were slow to learn or catch up. The problem with them is you can demonstrate ... And ask for a return demonstration you can be actual back to zero then you wonder, and she will tell you that 'I was there sister it's only that I am forgetting sister' you take her again ... You have to talk and talk and talk...however, she later improved with one-on-one interactionsbut needs a lot of effort and energy supping.in group demonstration and return demonstrations they were not learning anything' [CIGA1]

'...I was slow to grasp my staff... and expect the supervisor to be aware of it and assist me at my pace...needed several contacts...' [Kudakwashe]

The slow learner needed a lot need a lot energy from the supervisor which was frustrating to the supervisor and in turn making the student lose self-confidence and withdraw from the learning or being hesitant to join the process as revealed in the following discussion by CIWAI.

'I had one who took long to grasp procedures ... She had many challenges because she would give an excuse in everything as to avoid you to do any procedure with her ... Be it an assessment ... Anything and at first I thought it was me alone, but we found ... She would say to say 'I'm not ready' to everyone...' [CIWAI].

Faster learning emerged as the ability to quickly grasp and master the midwifery skills within a short space of time. Such learners were more likely to seek out opportunities for learning from the clinical instructors. This allowed them to gain more exposure to procedures and increased opportunities to practise. These students were viewed as easier to teach and easy to build teaching and learning relationships, hence facilitating a favourable learning environment and the required support. Learning and grasping skills at a faster rate exposed these students to super numeral status including being used in crisis management in the clinical environment as revealed in the following discussion with WSJSC1 ward supervisor and newly qualified midwife Tsitsi.

'We treat all students equally... though you tend to incline to those who are forth coming and quickly grasp their stuff because... its less work ... fast learners can grasp their skills after three attempts and can be used as a pair of hands in crisis.' [WSJSC1]

I was fast in grasping the skills I could watch the procedure demonstration once or twice and with three attempts I could actually be almost there and this made me gain favour from sisters and clinical instructors... could actually be trusted to work alone in crisis I could help.... even teach the slow ones...' [Tsisi]. Patience is crucial in supporting slow learners to acquire skills and gain confidence since

they needed time to develop and refine their skills and pass assessments. Where supervisors become frustrated and impatient with slow learners the peer support system proved critical as revealed in the following quote by Kudakwashe

'I was slow to catch up. My colleagues were so patient... They also wanted me to pass.... Colleagues they would take turns to make sure I am well supported even if I would fail my assessments the colleagues would take it upon themselves to make sure I work and master on the area posing problems... Had it not been of my colleagues I will have left this place with nothing... I needed a lot of energy to grasp the required skills....' [Kudakwashe].

Learning Orientations among Midwifery Students

According to this study learning is a process whereby understanding is produced through the transformation of experience by learners. Describing, learning as a product of the combination of grasping and transforming experience into skills. Individuals have their own preferred learning styles and these learning styles are critical in differentiating individual differences and preferences in grasping and transforming a learning experience into observable skills, critical in defining characteristics of each learning style. The learning styles which emerged from this study are individual and collective oriented learning.

An individual learning and teaching orientation can then be defined as the principle, philosophy, ideology and a point of view that give emphasis to the inherent value of the individual in facilitating their own learning. This includes their uniqueness in acquiring, grasping and developing the prerequisite skills to an acceptable standard. Individual oriented learners make the self as the facilitator of ability to learn hence, all learning activities are based on individual internal resources. The central premise of individual oriented learner is hinged on the belief that an individual student supported by their internal resources is of crucial importance in the learning struggle which has to be won irrespective of the price to be paid. As a result these learners are associated with poor help seeking behaviours as they do not believe in out sourcing, inclined towards the female gender as viewed by their peers. Such a belief about self-made the individual oriented learners to behave in a specific manner: alienation, pride, arrogance, rudeness and self centredness. Though the power of peer support cannot be over emphasized this includes, the power and inherent nature of evaluation in learning, acquiring and developing skills in midwifery education. The issues of evaluation is critical as it is associated with defining whether the skill is grasped, attained and refined and is measured against a given standards.

The evaluation sources in midwifery educated are three fold: peer, self and educator and if the standard is correct the results will always tally. Self-evaluation appears to be dangerous and detrimental to proud individuals who think they know it all and are always right and do not need help from others usually from peers and has associated stresses which cannot be hidden. Individual oriented learners despite having self-reliance they are prone to stress defined by peers as a call for help to facilitate acquisition of the defined standards in midwifery practice and act accordingly. However, lone learners do not appreciate such interventions and repay their sympathisers with rudeness, sulkiness and childness as they maintaining their pride as revealed by Tsitsi in the following quote: 'There were those people who were not cooperative and did not want to work with others.... Usually, such people will show pride after failing they will say 'I just did a small mistake'. However, as colleagues, we will see the stress they will be trying to hide and help them, and they will take it. They were also rude in such a way that if they are doing an abdominal palpation wrongly and you try to correct them, before failing, they will say 'that is the way I do it' and usually associated with females who are proud and think that they know it all and are self-sufficient and not need any assistance from anyone....' [Tsitsi].

In away individualistic oriented learners sound incompatible with collectivistic learners, they like working alone exploring new avenues and seek explanation on why there is only one correct and accepted way of doing procedures. These learners also exhibit divergent thinking non-compliant to laid down rules and enjoyed want to be experimental and creative. The learning and teaching environment appears prohibitive and innovation stifling. Accordingly it could be Oriented learners are also linked with artistic and relativistic mind and inclined towards self-creation and disruptive learning. As a result, Individual oriented learners must grow strong and have strength of their own to survive in the environment alone; but the greater that strength is, the greater their aloneness becomes more stressful as revealed in the following statement by blessed. 'I had already done my own assessment ... seen that she was not listening or practising correctly as she worked alone and I had developed a negative attitude towards her. Everything she did I will not see it positively and I would not trust her ...you talk to her on a procedure she has done wrong she can support the wrong way and will justify it and would also ask for a justification why it can't be done that way ... that way it was irritating ... Makes people angry as it becomes very difficult to correct such a person....' [Blessed].

Midwifery procedures need collective effort and approval from those around to define a qualifying midwifery practice as a community of practice where it is difficult for individuals to stand and survive alone. Community of practice could be

lost when an individual thought of creating a different way of doing procedures. Individualistic learning behaviours break ties with the vision shared by the other professional members. If this happens the individualistic oriented learner becomes more isolated and stressed and most probably losing the possibility of knowing one's self in terms of being a creative learner and belonging to a common group with a common practice. Consequently, such midwifery learners face greater relationship building and learning challenges as perceived by their peers in the following quote by Kudzi: 'Those who do not work with others they face many challenges ... Ended up failing... had a hard time because everything was upside down... not practising with others she was too confident for nothing, and she was also rude in such a way that if you try to correct her ... she will put you off and ... say that's how I do it ... They were not able to work well with others' [Kudzi].

Making peer teaching a powerful and a valuable tool for collectivistic oriented learners as revealed by Florence: 'They won't leave you until you get it. Even though sometimes it might become very difficult for this other person....you will realise that ... There is someone who is able and is good who will put things in a way you will understand so I don't know if one will ever find themselves in a situation where they cannot do it despite everyone trying to help them.' [Florence] '...we had accepted that those who are fast learners. Will...Pull the slow learners with them until they also get it correctly ... It was working very well ...' [Kudakwashe] However, there are those learners who exhibit both characteristics of Individualistic-collectivistic oriented learners as discussed by Kudzai in the following quote: '...We had those ones whom we did not understand whether they want to work alone or with others...We later discovered that these ones would work alone and only ask for help when they see it necessary...If they get it first, they don't care about others...'[Kudzai]

Discussion

Individualistic-Collectivistic Learning Styles Typology

The findings from this study are consistent with overwhelming evidence revealing that students have ways of assimilating, processing and recalling the information they have learnt to best acquire and master the new skills they were learning called learning preferences [33-41]. In this study the learning preferences emerged as those where students want to learn alone (individualistic) and those who want to learn in group (collectivistic). The individualistic learners from findings appeared to share some but not all characteristics of the constructivist learners of being creative and designing their own ways of doing things and not just follow laid down rules [42]. When compared to the

constructivist learners, the other students were rigid in their ways of thinking and did not want to share their ideas with peers or facilitators contrary to the constructivists. They would create a solitude environment around themselves and become hostile towards those around them if not allowed to explore new ways or different approaches to doing a given procedure. The possible explanation for this deviance could be that midwifery procedures are structured in such a way that they are sequential and only be done that way for the mentee to be viewed competent. Consequently, individualistic learners in this study found the environment hostile and unfriendly as they questioned the status quo, and why change was unacceptable to their mentors and peers who on the other hand failed to understand them. The individualistic learners, because of the pre-set standard of performing procedures, would briefly conform to the set standards for purpose of passing midwifery qualifying examinations but would return immediately to their ways of thinking and operating.

Despite the individualistic learners wanting to create knew knowledge, they, however, did not want to interact with their peers and to participate in problem solving activities which is contrary to the constructivist learners. In this study the individualistic learners, though they had some constructivist's characteristics, they were difficult to engage in group learning resulting in mentors and peers finding it difficult to facilitate the individualistic learners' skills learning. It becomes necessary to have individualistic-oriented mentors as revealed in this study, but the system does not prepare such mentors for the purpose of accommodating individualistic learners in the learning environment. Current environment favours those learners, known as collectivistic learners, who approach skill acquisition in an interactive manner to fit within the social learning framework as they do follow instructions to meet the laid down rules [43]. Collectivistic learners though they were able to exhibit some of the social learning parameters: observational learning, mimicking and motivated by approval during modelling of the learnt skills Bandura A [44-47] were slightly different in that they invested emotions in controlling their emotions to achieve personal and group goals as they show empathy for others in the process of establishing and maintaining supportive relationships. They also develop socio-emotional attachment.

Individualistic and collectivistic approaches to learning midwifery skill create an environment for an individualistic-collectivistic continuum of learning where those students who would be found at any level between the two extremes with the concepts of 'Bio Psychosocial Uniqueness', 'Dexterity Attainment Promptness', 'Time and Being' cutting across all the learning approaches giving rise to a definite learning approach: the Individualistic-Collectivistic Learner Typology.

The 'Dexterity Attainment Promptness' concept gave these learning approaches the 'slow and fast learner's brand label dividing it into six parts building up to an Individualistic-Collectivistic Learner Typology of its kind with both constructivism and social learning preferences though other characteristics are unaccounted for in this learner typology. 'The concepts of Time and Being' and that of Bio psychosocial Uniqueness', Dexterity Attainment Promptness and the associate learning approaches made the students in this study fit within the 'Individualistic-Collectivistic framework'.

The individualistic-collectivistic framework was first used by Hofstede G [48] to classify individual behaviours in the context of country specific cultural characteristics as individualistic or collectivistic. It was later adopted by Triandis HC [49] and Schwartz SH [50] and others in the context of culture. Individualism and Collectivism are multifaceted concepts describing the characteristics depicting the bio psychosocial nature of the individual [51-57]. Individualism indicates a worldview that gives precedence to individuals whereas Collectivism provides primacy to group goals and affiliations [52,57,58] in relation to social and personal traits [51,59,60]. The individualistic-collectivistic continuum was argued by Schwartz SH [56] and Green EG, et al. [61] in the context of culture. Similarly, in this study the concepts 'Bio Psychosocial Uniqueness', 'Time and Being', 'Dexterity Attainment Promptness' and 'Learning Orientation' describe individual bio psychosocial characteristics and their interrelatedness in midwifery education building a 'Student Learning Style Typology'. These bio psychosocial characteristics and the individual student approaches to learning which this study describes are similar to those of the Individualistic- collectivistic Framework first described by Hofstede G [48] in a cultural context to develop a learning style.

A learning style has concepts which describe their interrelatedness in facilitating teaching and learning of individuals. As in this study 'Bio Psychosocial Uniqueness', 'Time and Being', 'Dexterity Attainment Promptness' and Learning Orientations' are a composite of student learning. The interrelatedness of these concepts within a teaching and learning environment compares with what literature has designated as elements of a learning styles [33,62-64]. It is the interrelatedness of the concepts described in the above that makes it possible for the students who participated in this study to be categorised and best fitting in the Individualistic- Collectivistic Learner Typology consisting six learning preferences:

- Individualistic slow learner
- Individualistic fast learner
- Collectivistic slow learner
- Collectivistic fast learner
- Individualistic-collectivistic slow learner

- Individualistic-collectivistic fast learner

Several studies have also developed theories and models describing the characteristics of student and learning styles and skill acquisition and development [33-39]. However, these learning styles with their own uniqueness that is dissimilar the findings from this study which designate characteristics of learners using rate of learning, energy expenditure in learning skills and collectivistic or individualistic characteristics.

Value of the study

The first study to label features of learners using rate of learning, energy expenditure in learning skills and to use the individualistic-collectivistic framework to describe characteristic of student learning styles.

- Developed the collectivistic-individualistic characteristics framework to produce individualistic-collectivistic Learner Typology
- Learning midwifery skills and skill Attainment Promptness are associated with significant energy expenditure for both the mentee and the mentor

Conclusion

The positionality of the teachers and learners, in particular the Bio Psychosocial Uniqueness, 'Time and Being', 'Dexterity Attainment Promptness' and 'Learning Orientations' facilitated development of an Individualistic-Collectivistic Learner Typology [65,66]. This learner typology seemed to be embedded and propelled by power dynamics which shaped the direction of relationship building and energy expenditure for both the mentee and the mentor. The midwifery facilitators in this study faced challenges in handling crucial power relationships and learning dynamics which they were seemingly unprepared for.

Recommendations

We recommend that:

- Facilitation learning styles in midwifery education should take into account the 'Bio Psychosocial Uniqueness', 'Time and Being', 'Dexterity Acquisition Promptness' and 'Learning Orientation', of individual student.
- Further research be conducted to give more insight into the ever-changing characteristics of students to better accommodate their individualistic nature.

Limitations

This qualitative study was limited to three hospital-based learning institutions which are central hospital and could have missed out the characteristics, time and being dexterity

attainment promptness and learning orientation could be different from the other midwifery training institutions based in the provinces and mission hospitals.

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Conflict of Interest

The authors did not have did not have any conflicting interests.

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