



The Relationship between the Academic Performance of Extroverts and Introverts in Offinso College of Education on Teacher-Trainees

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ABSTRACT

The study examined the relationship between introverts, extroverts and academic achievement among College Teacher-trainees. The sample was made up of 117 males and 83 females. The extroverts and introverts were purposively and randomly sampled from first year Education college trainees of Offinso College of Education. The data collected was analyzed using the Cross tabulation, Chi-Square test and Pearson correlation. Per the Chi-Square test established a weak positive relationship between gender and personality which was not statistically significant ((1) =0.185, P=.667). A Pearson correlation revealed a weak negative correlation between introverts and their academic performance in the Child and Adolescent Development and Learning(CADL) course and a weak negative correlation between introverts and their academic achievement in Principles and Practice of Education and Curriculum (PPEC) course hence, rejecting the hypothesis of no significant relationship. A descriptive statistics of academic performance of introvert and extrovert Teacher-trainees revealed average scores for introvert and extrovert in CADL as 71.5% and 72.5% respectively and in PPEC were 64.5% and 67% for introvert and extrovert. This shows that there was no significant difference in the marks obtained by both personalities. The implication is that one's personality type does not so much affect one's academic performance.

KEYWORDS: Introverts, Extroverts, Academic performance, Extroversion, Introversion, Ambiversion

Introduction

Characteristics of Introvert and Extrovert

For purposes of better understanding their respective communication styles, it is important to examine some of

the basic characteristics that tend to distinguish introverts from extroverts. As reflected in Table 1, the mannerisms and behaviours of these personality types can be extremely polarized.

Table 1.0: Characteristics of Introvert and Extrovert

Introverts	Introverts	Extroverts	Extroverts
Can be happy alone.	Reserved, quiet and deliberate.	Are social-need people.	Establish multiple fluid relationships.
Dislike attending parties.	Form a few deep attachments.	Demonstrate high energy and noise.	Engage in lots of activities.
Need time alone to recharge.	Concentrate well and deeply.	Communicate with excitement.	Have many best friends and talk to them often.
Prefer non-group work.	Communicate best one-on-one.	Draw energy from people- loves parties.	Prefer face-to-face communications.
Cautious in meeting people.	Think carefully before speaking.	Lonely and restless when not with people.	Respond quickly.

Source: Burress and Kaenzig, (1999)

A cursory examination of the indicated characteristics would strongly suggest that introverts and extroverts truly reside in different worlds. However, exercising caution is necessary.

Personality types lend themselves to the formation of hybrids. It is reasonable to assume that neither all introverts nor all extroverts are confined to these predetermined sets of

behavioural categories. Some extroverts will relish opportunities at solitude and tranquillity; some introverts can exhibit high energy and have a multitude of friends.

As evidence of the diversity possible within a given personality type, (Henjum cited in Gosling, (2008; p. 40) identifies two categories of introvert. “Type A introverts would include those self-sufficient, confident, hard-working, successful people who have firm goals, are self-actualizing and are able to interact very well with people when they must or when they choose to do so. These people qualify as introverts because their general style could be described as “reserved” rather than shy. In other words, this type of person can function very adequately in social situations although on the whole he prefers activities that involve inner experience, introspection and subjectivity. Type B introverts would include those people who are shy, timid, and lacking in communication skills, very withdrawn and who have a low self- concept. In other words, these are people who have been “wounded” and are at a real disadvantage in our society. They may have a strong fear of people and generally experience extreme dread when they must do something in front of other. Their self-consciousness and sensitivity contribute to their usual achievement or performance being below their apparent overall ability, this is particularly true when they are placed in a new situation (Gosling, 2008; p. 40).

It is evident that some introverts have communication skills that are on par with the more socially-inclined extroverts. The Type ‘A’ introverts tend to be good actors in social settings. Accordingly, they can readily discuss information and ideas in an ever-expanding number of circumstances. On the other hand, the Type ‘B’ introverts tend to suffer most terribly because of their communication deficiencies. They are relegated to the most extreme fringes of society and forced to observe in silence and pseudo contentment.

Theoretical Framework

Adler as part of his Adlerian therapy made his case in relation to extroverts and introverts. To him, introversion among children mostly develops into feeling inferior. Although this initial experience of inferiority applies to everyone in infancy, it is not genetically determined. Rather, it is a function of the environment, which is the same for all infants- an environment of helplessness and adults. This, inferiority feelings are inescapable, but more important, they are necessary because they provide the motivation to strive and grow. People with inferiority complex have a poor opinion of themselves and feel helpless and unable to cope with the demands of life. Alfred Adler-an individual psychologist, found such a complex in the children of many adults who came to him for treatment. He also added that whatever the source of the complex, a person may tend to

overcompensate and so develop what Adler called a superiority complex (Corey, 1958).

Superiority complex involves an exaggerated opinion of one’s abilities and accomplishments. Such a person may feel inwardly self-satisfied and superior and show no need to demonstrate his or her superiority with accomplishment. Or the person may feel such a need and work to become extremely successful. In both cases, persons with a superiority complex are given to boasting, vanity, self-centeredness, and a tendency to degenerate others. The striving for superiority or competence is a natural and fundamental motivation of individuals but may assume positive or negative dimensions. For example trying to achieve superiority in a negative direction might include trying to achieve wealth or fame through unethical business or political purpose. Seeking the goal of superiority in a positive sense might mean helping others through business, social dealings, education, and others. The Adlerian therapy postulated three factors that may give rise to inferiority complex or threaten the development of self confidence and social interest in childhood. There are physical disabilities, pampering (spoiling) and neglect (Corey, 1992).

Frederick Perls, cited in Corey, (1992; p.84), healthy individuals engage productively in the tasks of survival and maintenance and intuitively moved toward self-preservation and growth. A basic assumption of Gestalt therapy is that individual can deal with their life problems themselves, especially if they are fully aware of what is happening in and around them. Because of certain problems in development like extrovert and introvert, people find various ways to avoid problem and, therefore, reach impasses in their personal growth. The therapy provides the necessary interactions and challenge to help them proceed toward integration and a more authentic and vital existence. (Corey, 1992). Gestalt therapy therefore, seeks to help people develop awareness, inner support, and self-sufficiency so that they can recognize that the capacities rather than in a partner, title, career, or clinician (Scar & Thompson, 1994; P. 45).

Another trait theorist, psychologist Eysenck, (1971) also used factor analysis to identify pattern of traits. He found that personality could best be described in terms of two major dimensions. The dimensions were extroversion-introversion and neuroticism (Stability-Instability). People who are introvert tend to be moody and are much more likely to cry, get angry or experience other strong emotional reaction. Those in extrovert group are calm, even-tempered, carefree, and have leadership possibilities.

The Relationship Between Introverts and Extroverts

Extraversion

Extraversion and introversion are typically viewed as a single continuum. Thus, to be high on one is necessarily to

be low on the other. Jung, (1921) and Myers, (1992) provided a different perspective and suggested that everyone has both an extroverted side and an introverted side, with one being more dominant than the other. In any case, people fluctuate in their behaviour all the time, and even extreme introverts and extroverts do not always act according to their type. Extraversion is the act, state, or habit of being predominantly concerned with and obtaining gratification from what is outside the self. Extroverts tend to enjoy human interactions and to be enthusiastic, talkative, assertive, and gregarious. They take pleasure in activities that involve large social gatherings, such as parties, community activities, public demonstrations, and business or political groups. Politics, teaching, sales, managing and brokering are fields that favour extraversion. An extroverted person is likely to enjoy time spent with people and find less reward in time spent alone. They tend to be energized when around other people, and they are more prone to boredom when they are by themselves (Helgoe & Laurie, 2008).

Introversion

Introversion is the state of or tendency toward being wholly or predominantly concerned with and interested in one's own mental life (Bartol & Bartol, 2008). Introverts are people whose energy tends to expand through reflection and dwindle during interaction. Introverts tend to be more reserved and less outspoken in large groups. They often take pleasure in solitary activities such as reading, writing, music, drawing, tinkering, playing video games, watching movies and plays, and using computers; along with some more reserved outdoor activities such as fishing (Bartol & Bartol, 2008).

Social networking sites have been a thriving home for introverts in the 21st century, where introverts are free from the formalities of social conduct and may become more comfortable blogging about personal feelings they would not otherwise disclose. The archetypal artist, writer, sculptor, engineer, composer, and inventor are all highly introverted. An introvert is likely to enjoy time spent alone and find less reward in time spent with large groups of people, though he or she may enjoy interactions with close friends. Trust is usually an issue of significance, a virtue of utmost importance to an introvert choosing a worthy companion. They prefer to concentrate on a single activity at a time and like to observe situations before they participate, especially observed in developing children and adolescents. Introverts are easily overwhelmed by too much stimulation from social gatherings and engagement. They are more analytical before speaking. Introversion is not the same as being shy or being a social outcast. Introverts prefer solitary activities over social ones, whereas shy people (who may be extroverts at heart) avoid social encounters out of fear, and the social outcast has little choice in the matter of his or her solitude (Jung, 1921).

Ambiversion

Although many people view being introverted or extraverted as a question with only two possible answers, most contemporary trait theories (e.g. the Big Five) measure levels of extraversion-introversion as part of a single, continuous dimension of personality, with some scores near one end, and others near the half-way mark. Ambiversion is a term used to describe people who fall more or less directly in the middle and exhibit tendencies of both groups. An ambivert is normally comfortable with groups and enjoys social interaction, but also relishes time alone and away from the crowd (Helgoe & Laurie, 2008).

Introversion and extraversion refer to the direction of psychic energy. If a person's psychic energy usually flows outwards then he or she is an extravert, while if the energy usually flows inwards, the person is an introvert. Extraverts feel an increase of perceived energy when interacting with a large group of people, but a decrease of energy when left alone. Conversely, introverts feel an increase of energy when alone, but a decrease of energy when surrounded by a large group of people. (Laney, 2002)

Eysenck, (1971) described extraversion-introversion as the degree to which a person is outgoing and interactive with other people. These behavioural differences are presumed to be the result of underlying differences in brain physiology. Extraverts seek excitement and social activity in an effort to heighten their arousal level, whereas introverts tend to avoid social situations in an effort to keep such arousal to a minimum. He designated extraversion as one of three major traits in his P-E-N model of personality, which also includes psychotics and neuroticism. He originally suggested that extraversion was a combination of two major tendencies (ie. impulsiveness and sociability). He later added several other more specific traits, namely liveliness, activity level, and excitability. These traits are further linked in his personality hierarchy to even more specific habitual responses, such as partying on the weekend. Eysenck

compared this trait to the four temperaments of ancient medicine, with choleric and sanguine temperaments equating to extraversion, and melancholic and phlegmatic temperaments equating to introversion (Eysenck, 1971).

The relative importance of nature versus environment in determining the level of extraversion and introversion is controversial and the focus of many studies. A study on twins who were extroverts and introverts found a genetic component of 39% to 58% respectively. In terms of the environmental component, the shared family environment appears to be far less important than individual environmental factors that are not shared between siblings (Segal & Rich, 1988). Eysenck, (1963) proposed that extraversion was caused by variability in cortical arousal. He hypothesized that introverts are characterized by higher levels of activity than extraverts and so are chronically more

cortically aroused than extraverts. The fact that extroverts require more external stimulation than introverts has been interpreted as evidence for this hypothesis. Other evidence of the "stimulation" hypothesis is that introverts salivate more than extraverts in response to a drop of lemon juice. Extraversion has been linked to higher sensitivity of the mesolimbic dopamine system to potentially rewarding stimuli. This in part explains the high levels of positive affect found in extraverts, since they will more intensely feel the excitement of a potential reward. One consequence of this is that extraverts can more easily learn the contingencies for positive reinforcement, since the reward itself is experienced as greater (Costa, McCrae, 1980).

Gosling, (2008) found that introverts have more blood flow in the frontal lobes of their brain and the anterior or frontal thalamus, which areas are dealing with internal processing such as planning and problem solving. Extroverts have more blood flow in the anterior cingulate, temporal lobes, and posterior thalamus, which are involved in sensory and emotional experience. This study and other research indicate that introversion-extraversion is related to individual differences in brain function.

Characteristics of extroverts and introverts

Fox, Schmidt, Rubin, and Coplan, (1996) extroverts and introverts have a variety of behavioural differences; extraverts tend to wear more decorative clothing, whereas introverts prefer practical, comfortable clothes. Extroverts are likely to prefer more upbeat, conventional, and energetic music than introverts. Personality also influences how people arrange their work areas. In general, extroverts decorate their offices more, keep their doors open, keep extra chairs nearby, and are more likely to put dishes of candy on their desks. These are attempts to invite co-workers and encourage interaction. Introverts, in contrast, decorate less and tend to arrange their workspace to discourage social interaction.

Jung, (1921) is of the view that extraverts and introverts have real personality and behaviour differences, it is important to avoid pigeonholing or stereotyping by personality. Humans are complex and unique, and because extroversion varies along a continuum, they may have a mixture of both orientations. A person who acts introverted in one scenario may act extraverted in another, and people can learn to act “against type” in certain situations. Jung's theory states that when someone's primary function is extraverted, his secondary function is always introverted and vice versa (Heist, 1968).

Implications of introversion and extraversion

Pavot, (1990; p.129-130) Acknowledged that introversion and extraversion are normal variants of behaviour can help in self-acceptance and understanding of others. For example, an extrovert can accept her introverted partner's need for

space, while an introvert can acknowledge his extroverted partner's need for social interaction have found a correlation between extraversion and happiness. That is, more extroverted people tend to report higher levels of happiness than introverts. This does not mean that introverts are unhappy. Extroverts simply report experiencing more positive emotions, whereas introverts tend to be closer to neutral. This may be due to the fact that extraversion is socially preferable in Western culture and thus introverts feel less desirable. In addition to the research on happiness, other studies have found that extroverts tend to report higher levels of self-esteem than introverts. Rubin, Bukowski & Parker, (1998) suggest that such results reflect socio-cultural bias in the survey itself. Introverts acknowledge more readily their psychological needs and problems, whereas extroverts tend to be oblivious to them because they focus more on the outer world. Extraversion is perceived as socially desirable in Western culture, but it is not always an advantage. For example, extroverted youths are more likely to engage in delinquent behaviour.

Conversely, while introversion is perceived as less socially desirable, it is strongly associated with positive traits such as intelligence and "giftedness." For many years, researchers have found that introverts tend to be more successful in academic environments, which extroverts may find boring. Career counsellors often use personality traits, along with other factors such as skill and interest, to advise their clients. Some careers such as computer programming may be more satisfying for an introverted temperament, while other areas such as sales may be more agreeable to the extraverted type. Although neither introversion nor extraversion is pathological, psychotherapists can take temperament into account when treating clients (Sharma, 1980; p. 137-142). Clients may respond better to different types of treatment depending on where they fall on the introversion/extraversion spectrum. Teachers can also consider temperament when dealing with their pupils, for example acknowledging that introverted children need more encouragement to speak in class while extraverted children may grow restless during long periods of quiet study (Sharma, 1980).

It is asserted that Americans live in an extroverted society that rewards extrovert behaviour and rejects introversion. American culture values extroverted qualities more, and people often feel like they've been given the 'short end of the stick' after receiving their results on extroversion/introversion tests (Johnson, Wiebe, Gold & Andreasen, 1999). Other cultures, such as Central Europe, Japan or regions where Buddhism and, Sufism prevail, prize introversion. The basic difference between an introvert and an extrovert is not whether or not the individual displays excessive energy or clings to the side lines. These may be manifestations of introversion or extroversion, but is not what delineates the two. What distinguishes one from the

other is an internal factor that cannot be seen. Introverts draw their energy from within. In order to be productive and happy, the introvert must have quiet time to reflect and to process stimuli. Those who cannot hear themselves think when in a crowded and overly stimulating environment (Johnson, et al., 1999).

Introverts typically enjoy the process of thinking something through, entertaining new ideas, and playing with multiple possibilities, but we do so in private. Introverts develop close friendships and much prefers a few close friends to many acquaintances. You will rarely hear an introvert claim that they have a multitude of friends; while many extroverts freely list everyone they know as friends. It's not because introverts have fewer friends. It's because the definition of friendship differs from that of the extrovert (Rossier, 1976).

To an introvert, a friend is someone they can count on in any circumstances, someone they can share their innermost thoughts with, someone that can call at any hour of day or night. A friend is someone who they share a deep bond with. Extroverts, on the other hand, are quite happy to call those who they do things with friends. Extroverts draw their energy from the world around them. They cannot be happy unless they receive stimulus from the outside world. They prefer to think on their feet, react immediately to their surroundings, and generally be in the thick of things. Introversion, negative affectivity, and constraint have all been hypothesized to relate to behavioural inhibition and to an ease of acquisition of aversive associations and avoidance responses. Therefore, traumatic experiences or vicarious conditioning may lead to higher levels of fear and avoidance in inhibited children and adults (Leitenberg, 1990).

Relationship between Extroverts, Introverts in relation to Gender and Academic Achievements

Research into the social behaviour of school children has long yielded convincing evidence of negative consequences resulting from a lack of peer relationships. In comparison to the state of research regarding externalizing and aggressive behavioural patterns, less is known about the roles of introvert or social inhibition in the context of difficulties adapting to social and school situations existed which demonstrate significant consequences and side effects of social inhibition in school age children in relation to gender differences (Parker & Abher, 1987 & Crozier, 2001),

In a long-term study conducted by Caspi, Elder & Ben, (1988), found relationships between introvert in childhood and coping with various developmental tests in adulthood. As grown-ups, introvert boys had, among other things, delayed access to a stable career path and to mirage and fatherhood, but no psychopathological problems. No such delays manifested themselves with introvert girls. A comparison study in Sweden produced similar findings

(Kerr, Lambert & Bem, 1996), with the difference that introvert boys in this case suffered no career setbacks. As grownups, on the other hand, introvert girls achieved a lower educational level as their extrovert counterparts.

In regard to certain correlation of introvert and social inhibition, gender differences are in fact already present in childhood. In a sample survey of 3-6 year-olds, Mayer, (1992) found negative correlations between introvert and socio-metric nominations by peers strictly with boys four years or older. Introvert boys received fewer positive motivations, but no more rejection than their extrovert counterparts. On the other hand, introvert did not affect the girls' nominations. In a longitudinal section study by Bowen, Vitaro, Kerr and Pelletier (1995), it turned out that introvert as rated by Kindergarten classmates of the same age likewise was a predictor for internalizing problems in the fifth grade. As these studies have demonstrated, it could be inferred that introvert socially inhibited behaviours are manifested primarily by boys, to their disadvantage. Introvert contradicts the male stereotype more than the female stereotype. Boys must therefore not only deal with their own social inhibition, but also with a lack of social recognition. Under the circumstances, the self-conscious behaviour can even evoke somewhat negative reactions from peers. Such reactions to boys with a typical characteristics increase particularly during the primary school years (Marsh & Shavelson, 1985).

One may be considered to be shy and introverted if that person draws power from self-reflection and contemplation. Working in groups costs one's energy and may even cause panic, for this or other reasons one dread situation is that one must speak up loudly and forcefully. It would rather work at one's desk or in one's cubicle than attend meetings and give presentations (Hay, 1997).

The internal pressure not to participate in certain situations can be very powerful when reinforced by personality traits and a lifetime of practice. Sometimes extroverted people will dominate a situation, not even realizing that others have differing ideas and opinions. People tend to get rewarded depending on their "contributions," but the people with the loudest voices don't always have the best ideas. On the other hand, it is very satisfying to see your own ideas discussed, accepted, and implemented. It can be difficult to act opposite your personality tendencies and habits, but small steps can lead to larger ones (Bartol & Bartol, 2008).

Extroversion (E) and introversion (I) are used to describe where a student focuses his or her attention in the learning process. Extroverts tend to focus their perception and judgment on people and objects; they are energized by what is going on in the outer world rather than the inner world of their mind. Extroverts usually prefer to communicate more by talking than by writing and to learn by experiencing. Thus, extroverts prefer to learn through

acting rather than reflecting. Introverts become aroused to action by what goes on in their own mind. Introverts tend to focus their attention on concepts and ideas and are more comfortable when they are expected to spend most of their time just thinking. In fact, introverts prefer to reflect before acting (Marsh, Byrne & Shavelson, 1988).

It is no wonder that students preferring extroversion had a lower mean than students preferring introversion. Legal education rewards the preferred learning style of introverts, although you might be misled if you sat in on a typical Socratic classroom. Extroverted law students think well when talking, learn well in groups, and may have difficulty sitting in front of a book for a long period of time. Because of the legal education's reliance on Socratic discussion in the classroom, extroverted law students are usually able to concentrate well and tend to leap into discussion readily. In fact, extroverted law students are likely to begin answering the questions immediately, thinking of what they want to say as they speak. Introverted law students, on the other hand, need some time to think before they are required to answer. If introverted law students have not anticipated questions before hand, they may perform poorly during Socratic dialogue. Furthermore, because introverts do not always share what they know, teachers may be slow to appreciate their talents and depth of knowledge. Typical Socratic dialogue may cause some law professors to press introverted law students into participating (Marsh, et al., 1988).

However, such pressure will often only increase the introverted law student's withdrawal. Law professors should respect introverted law students' need to think before talking by either giving them advanced notice of being called on, advance notice of the questions, or a brief twenty to thirty seconds to think before answering. If professors use one of these routes, introverted students will participate more effectively without increasing their withdrawal. However, professors should encourage introverted law students to participate in class and group activities that help to develop the extroverted side of their personalities. Nevertheless, despite the Socratic dialogic behaviour emphasis in the classroom, most of the learning in law school occurs outside the classroom in "solidarity reflection" and involves a high degree of reading and verbal reasoning. Consequently, introverted law students are able to study more effectively, since introversion is correlated with reading and verbal reasoning. Further, much of law study involves thinking alone, something introverts do well. Furthermore, since introverts tend to prefer writing over talking, they often do better on written tests on concepts than oral tests on practical application. Consequently, it is not unexpected that introverted law students will have a relative advantage on most law school exams that are more concerned with the students' understanding of concepts. They will also have a relative advantage in obtaining favourable grades since few

law professors factor in class participation as a component of the course grade (Marsh, et al., 1988).

On the other hand, "solidarity reflection" can be counterproductive for extroverted law students who prefer to think while acting (or even after acting). Extroverted law students need to be encouraged to make the process of the legal learning environment more active. They need to be encouraged to fill their learning situation with talking and discussion, activity and group work. They can use group discussions, cooperative projects and study groups to more thoroughly understand legal theories. However, they also need to be encouraged to identify experiences where they learn to study effectively alone (Muijs, 1997).

Furthermore, extroverted law students will learn theories or facts better if they connect the theories or facts with their own experience. However, because extroverted law students tend to leap into reading assignments with little forethought, even in the classroom discussion, they need to be encouraged to take time to anticipate issues and problems. Extroverted law students generally perform better on oral than on written tests. Consequently, they should be encouraged to practice writing examinations and hypothetical. Law students often rely on their ability to learn facts. Because many law school exams test a law student's understanding of concepts and analysis -- this reliance is misplaced. This may be a particular problem for extroverted law students who actually learn facts better than concepts and ideas. Consequently, extroverted law students need to be repeatedly encouraged not to rely on their understanding of facts but to undertake activities that will stress their learning of concepts and analysis. Finally, extroverted law students should be encouraged to take clinical programs since they particularly benefit from programs where "practical experience goes hand-in-hand with concepts and theories (Ateel, Saqib & Ali, 2005).

You are an instructor who recognizes that your students must be public people at times. You also recognize that this is not a natural way of acting for many of them. You want to help them become comfortable in putting themselves and their ideas forward. There are a lot of requirements on you as an instructor, of course. It can be difficult to take on a new responsibility, especially one not related directly to your subject matter. It often seems like it will only take up time better devoted to the material at hand. Your teaching methodology, however, can often achieve subsidiary goals in parallel with your main objectives and little impact on time. In fact, some techniques can make the classroom more valuable for everyone, both with respect to the specific course and the wider goals of preparation for life. Many of my students consider themselves introvert. You will recognize them in class as they seldom speak up, ask questions, or volunteer for visible tasks. You know, however, that they will need to assume more public personas if they are to be successful in the real world.

Therefore, organize your courses and other student interactions with interactive exercises to draw out public participation from all your students, especially those who don't put themselves forward naturally. The individual herself must, of course, become more comfortable in public interactions, but you can help them practice some of the things in the first pattern within your courses. While this feels at first like additional pressure on the student, if your classroom is a safe place in which to experiment and learn then it need not be dismaying to the student. Your task is to make them ready for their futures, and it is better that they get the practice with you than in situations later when an unwillingness to act can have serious repercussions. Organize your courses so that each person must participate in a visible way. Use round-robin question techniques, rather than asking for volunteers. Have the students do short presentations. Make your class a safe place for students to get practice in speaking and contributing. You may think that a person that is shy in person would do better in e-mail lists and chatrooms where one doesn't need to worry about sweaty palms, thinking on your feet, and cracking voices. This turns out not always to be the case.

Many people who are shy in person are also shy in cyberspace. If you teach online or partly online courses you need to draw out your students just as much as you do face to face. Here you can give tasks to students privately that they must respond to publicly. Use role-playing as much as possible in your courses so that your students can get accustomed to taking on a role. This is easy to do in Software Engineering, where you need different roles anyway. If you are teaching object oriented systems and/or programming you can also easily incorporate role playing into system walk through. Each student plays the role of a single object. Give them feedback privately on their presentations. Use the pattern community's technique of starting with positive feedback and then constructive suggestions for improvement. If you use the Gold Star pedagogical pattern, be sure to give gold stars for the things you value most. Participation is worth rewarding, especially when it comes from someone who finds it hard to do. These visible rewards encourage more of the same from your students (Camperio, Capiluppi, Veronese & Sartori, 2006).

Look at your own teaching style to see if you are a good role model for your students in this regard. They will learn more from you than the material you present. If you let them be passive in the classroom, they are learning a lesson that you may not want them to get. If you are Extroverted (or seem to be such to your students) and one of your students is introverted you can help them by asking them to research and then teach you something you don't know. Ask them to do it orally, but informally (Natthin, Wethington & Kesser, 1990).

Encourage the shy students to take a course in speech or theatre. Organize students into groups

occasionally in which the shy students can interact with each other. Try to do this in such a way that the students can recognize that there are others like themselves. Organize them into groups and assign roles in such a way that people need to act counter to their perceived personality types. In the theatre group mentioned above I was participating in the background (theatre manager) but was so invisible that the director neglected to list me in the production credits. To make up for this he altered the script to give me the "Prithee..." line and called me by name to deliver it. He was my Honours English professor and one of my first mentors. Encourage (demand) that an especially shy student say something (anything) in each of the next two classes. One professor met a student between terms and began a conversation with something like "I've noticed that you have really good ideas, but we don't get to hear very much of them. I'd really like you to give us one of your ideas in each of the first two classes of the coming term." (Natthin et al., 1990).

Another suggestion is to hold a lottery associated with any student presentation to determine who is privileged to ask the first question and/or lead the discussion after the presentation. If you are a shy person who has learned these tricks, be sure to let your students know this. Let them know how, if you can articulate it. If you can point to a well known and respected introvert that is also a good presenter, do so for your students. If a shy student is attacked by others for ideas or presentation then it may be appropriate to join in common cause with the attacked student in defence of the idea (if it is a good one) and against ridiculing. If you do this, however, try to do it in such a way that the student isn't simply defended by a powerful ally, but is given sheltered space in which to defend him or herself.

To promote learning, we encourage our students to be actively involved in class discussions by asking and answering questions. Even if we do not include class participation in our grades, how a student behaves in class does influence our perception of the student's abilities. These opinions may become important if the student's grade in class is on the borderline or the student asks for a letter of recommendation. One factor in evaluating students that has been ignored is temperament. To better understand a student's behaviour, we need to examine whether the student is an extrovert or an introvert. Since most people, including teachers, are extroverts; the introvert may not be understood and judged appropriately (Leitenberg, 1990).

The main difference between the extrovert and the introvert is how each receives his energy. An extrovert is energized by external sources, such as people, activities, and objects. The introvert is the opposite. His sources of stimulation are internal ones such as ideas, impressions, and emotions. Extroverts and introverts also vary in their response to external stimulation. An extrovert thrives in an active setting and wants variety in the material presented.

“The Relationship between the Academic Performance of Extroverts and Introverts in Offinso College of Education on Teacher-Trainees”

The introvert tries to reduce the amount of outside stimulation by behaving in a passive manner and prefers fewer topics presented in more depth (Zerface, 1970). Research has shown that extroverts and introverts process information differently using different parts of the brain and different neurotransmitters. The extrovert draws upon small amounts of information in his short term memory in developing his thoughts, while the introvert recalls thoughts stored in his long term memory to build more complex associations. The introvert needs more time, therefore, to develop his ideas and express them. Based on these differences, we see that the extroverted student and the introverted student perform differently in the classroom. In a lively classroom the extrovert appears excited by the discussion and eager to participate, while the introvert may seem unenthusiastic and unsociable (Littlewood, 1983).

One study showed that more extroverts rated themselves more academically successful than introverts (Irfani, 1978). According to this study, the possibility that a student will rate himself academically successful is likely to be greater when the student is extroverted rather than introverted (Irfani, 1978, p. 505). In contrast, another national study found that “stable introverts are the highest academic performers” (Furnham & Medhurst, 1995, p. 197). This study charted the actual degree of academic success and concluded that “introverts predominate among outstanding students” (p. 207). It was also noted that although introverts are frequently among the top students, the GPA of introverts and extroverts differs only slightly.

These perceptions are not presenting a complete picture of our students. The introvert is so busy reflecting on the ideas that it does not occur to him to volunteer to answer questions. Rosier, (1976), sees introverts as people who prefer to work independently, but they may perform well in small groups. How much the introvert participates will depend upon the temperament of the other members. Extroverts who recognize the intelligence of the introvert can encourage him to be more active because introverts often are good at explaining material to others. How can we, as instructors, provide support for introverts in their classroom? First we should be aware that the student sitting in the back may be an interested introvert and not an unmotivated student. The introvert is comfortable when allowed to observe and uncomfortable when pressured to perform. In order to get this student involved, we must directly ask the student to respond. Designing rotations so that all students are asked to participate will make the introvert more of a part of the class. Allowing the students to prepare questions at home by assigning the material for the next class discussion in advance can help. Using required office hours to meet each student individually helps us to get to know our students better. As we become more aware of our students’ personalities, we can better prepare our students to meet our expectations and become more

successful in our classes (Rubin, Bukowski, and Parker, 1998).

Studies chart the success of extroverted and introverted students. These have divided academic success into two categories: self- rated academic success (Irfani, 1978) and the actual degree of success (Furnham & Medhurst, 1995; Olympia et al., 1994). One study showed that more extroverts rated themselves as academically successful as introverts (Irfani, 1978). So, according to these studies, the possibility that a student will rate himself academically successful is likely to be greater when the student is extroverted rather than introverted (Irfani, 1978, p. 505). In contrast, another study found that stable introverts are the highest academic performers (Furnham & Medhurst, 1995, p. 197). This study charted the actual degree of academic success and concluded that introverts predominate among outstanding students (p. 207). It was also noted that although introverts are frequently among the top students, the GPA of introverts and extroverts differs only slightly. This is what informed the researcher to conduct this study to find out whether introverts will do well in CADL and PPEC than extroverts and vice versa.

Introverts choose to study where the number of people and amount of stimulation is minimized (Campbell & Hawley, 1982, p. 141). Group study is usually minimal because introverts study better when they are not being distracted. Introverts tend to select study environments that have few or no people, such as their bedroom. When they study in libraries, they prefer locations that allow them to be alone. When we look at preferred study environments and study groups for extroverts, the results are nearly the opposite. Campbell and Hawley (1982) found that extroverts prefer locations where socializing opportunities abound and the level of external stimulation is high (p. 141). Extroverts typically spend more time studying in groups and choose “busier” locations to study in, such as student centres and dining halls. The typical extrovert is sociable, needs to have people to talk to, and does not like reading or studying by himself” (Campbell & Hawley, 1982, p.139). If extroverts do study at the library, they “occupy library study locations which maximize external stimulation” (Campbell, 1983, p. 308).

These reports suggest that introverts and extroverts differ in regard to study location and studying in groups. Campbell and Hawley (1982) discovered that there were differences in the frequency of breaks and the reason for taking these breaks between introverts and extroverts. Introverts prefer study locations without a lot of external stimuli so they are not distracted or influenced to take breaks. Consequently, they study for longer periods of time before they take a break. On the other hand, because extroverts are sociable and prefer to study in areas where there is a great deal of external stimulation, they are more easily distracted, leading to a higher frequency of breaks.

The study under discussion is carried out to either support or reject the contrasting views of Irfani, 1978; Furnham and Medhurst, 1995; Olympia et al., 1994 ; Campbell and Hawley, 1982 and 1983 respectively or to take a neutral stand.

Research Design

To execute this study, survey research design was adopted. This was because it involved a study of relatively large population of respondents out of which a representative sample of the subgroups in the population was randomly selected. Survey research involves larger numbers of people and describes population characteristics by the selection of unbiased sample. It involves the use of questionnaire and sometimes interview tests (Alonge, 2010; p. 49-54).

Alonge, (2010), posited that, the design that uses survey to obtain a description of a particular group of individuals is called the survey research design. The goal of the survey design is to obtain an accurate picture of the individuals being studied. It provides a ‘snapshot’ of the group at a particular time. The use of the survey design is very necessary for this study even though it has some setbacks such as the potential for interviewer bias, especially when close ended questions are used. Secondly, it can be time consuming. Also, it can be expensive, as a consequence of these setbacks, the survey can have low response rate and non-response bias, its numerous advantages cannot be overemphasized. Some of these advantages are that: It is convenient and anonymous. It is non-threatening to participants. It is easy to administer. It is efficient to administer with groups. Participants can stay at their homes or offices and respond to the questionnaires. It was also added that survey design is appropriate for research that aims at seeking people’s views about issues, events, policies and others. He further opined that, a survey allows the collection of data that may be used to access current practices and conditions and make plans to improve them.

Population

Population refers to the entire aggregation of cases that meet a designated set of criteria. It must be noted that whatever the basic unit, the population always comprises the entire aggregation of elements in which the researcher is interested (Alonge, 2010; p.49-54). In the case of this study, the population was student-trainees of Offinso College of Education whiles the target population comprised of all first year Level one hundred Education student- trainees from Offinso College of Education for the 2011/2012 batch. There were nine hundred (900) trainee-students in all.

Sample Size and Sampling Technique

Sample consists of a carefully selected subset of the units that comprise the population. Sampling is thus the process of choosing the units of the target population which are to be

included in the study. In sampling, the units that make up the samples and population are referred to as elements. The element is the most basic unit about which information is collected. In social research, the elements are usually humans (Alonge, 2010; p. 49-54). The sample consisted of two hundred (200) student-trainees which included 117 male and 83 female students from diploma one. The elements were purposively and randomly selected from each class till the researcher attained the required number of two hundred (200) sample size. The study was limited to only the extroverts and introverts of Level one hundred education student-trainees. The introverts and extroverts were determined upon close interaction with trainees in guidance and counselling activities and close observation during instruction. In addition, the researcher used first year academic results in two educational courses of student-trainees for measuring the academic performance of introvert and extrovert student-trainees in the College.

Instruments for Data Collection

Survey Likert scale questionnaire was adopted for data collection in this study. It was adopted from Martin Olsen Laney (2002) to reflect the purpose of the study. It comprised of fifteen (15) standard structured items. The questionnaire was divided into three (3) major sections. Section A sought for information about the bio-data of the introvert and extrovert student-trainees while sections B and C sought for information to test the four (4) hypotheses.

All the items were structured. Each of the items in the last two sections of the questionnaire consisted of an open statement, which was followed side-by-side by a list of four optional responses. The responses were structured in the Likert-scale format and include: Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD). They were also assigned numerical weight of 4, 3, 2, and 1 respectively. The respondents were instructed to select the option most appropriate to them and that corresponds to their opinion about the statement provided.

Validity and Reliability

The questionnaire was adopted by the researcher from Martin Olsen Laney, based on experience and to reflect the dependent and independent variables and also based on literature reviewed, purpose of study and research hypotheses. In addition, the questionnaires were given to my supervisor and two other experts in Educational Psychology at the University of Education, Winneba- Kumasi campus to read through and offered the necessary advice where possible. They helped to correct all errors, corrected and reframed its content in line with the research topic, purpose of study and the research hypotheses. They modified certain aspects and suggested other areas of improvement where necessary. Their suggestions and corrections were affected. All the corrections helped to ensure that the instrument was

close to perfection and was of high content, construct and face validities.

Ten copies of the questionnaire were trial-tested on ten extrovert and introvert student-trainees who were not part of the main study. The study established the degree of consistency of the questionnaire at providing the required information. The resulting data was divided into two equal halves and correlated statistically with a correlational statistic. The analysis gave a correlation (reliability) coefficient of 0.864 of the reliability value of Spearman-Brown. This indicated that the questionnaire was highly reliable and good.

Method for Data Collection

An introduction letter was collected from the Head of Department of Psychology and Education, University of Education, Winneba. The introduction letter was sent to the Principal of the College to seek permission to undertake the research. The researcher used only Level one hundred (100) Education student-trainees with the sample size being two hundred (200) having established that they could answer the entire questionnaire. The sample size made up of 117 male and 83 female extroverts and introvert students of the college. The questionnaire was administered on the respondents partly by the researcher and partly by some colleague tutors. It was administered on student-trainees on campus at the Offinso College of Education in the fourth week of the second semester.

Method of Data Analysis

A standardized introvert and extrovert scale by Martin Olsen Laney made up of fifteen (15) items were structured to suit the study. Students were therefore to read each item carefully and decided to what extent it was characteristic of their feelings and behaviour. The scale was ranged from: Strongly Agree (SA) =4, Agree (A) =3, Disagree (D) =2, and Strongly Disagree (SD) =1. Respondents were expected to tick the appropriate columns as applicable to them. If respondents happened to answer summing up to the range of 45-60 indicated strong extroverts, between the ranges of 30-44 also indicated mild extroverts. However, between the ranges of 25-29 indicated strong introverts and 24 and below indicated mild introverts. This scale was to find out the level of introvert and extrovert student-trainees.

Data on academic performance was the academic results of the sample for a whole academic year on the

educational courses: Principles and Practice of Education and Curriculum (PPEC) and Child and Adolescent Development and Learning (CADL). The results were categorized into introverts and extroverts for two semesters. Cross tabulation,

Chi Square, and Pearson Correlation Coefficient test was used for the results. Chi-square can be used as a “goodness of fit” test. This assesses whether the patterns of results matches (or fits) a predicted pattern. It enables the researcher to ascertain whether the patterns identified are significant (Amedahe & Asamoah-Gyimah, 2001). The Pearson product-moment correlation coefficient (r) is a measure of the strength and direction of association that exists between two variables measured on at least an interval scale or ratio level. In Pearson’s correlation, variables are approximately normally distributed. It is also sensitive to outliers so it is best if outliers are kept to a minimum or there are no outliers (Amedahe & Asamoah-Gyimah 2001).

Relationships between Gender and Personality

1. H_0 : There is no significant relationship between gender and personality (introvert and extroverts) of college students.

Introversion and extraversion personality refer to the direction of psychic energy. If a person’s psychic energy usually flows outwards then he or she is an extrovert, while if the energy usually flows inwards, the person is an introvert. Extroverts feel an increase of perceived energy when interacting with a large group of people, but a decrease of energy when left alone. Conversely, introverts feel an increase of energy when alone, but a decrease of energy when surrounded by a large group of people (Laney, 2002).

A long-term study conducted by Caspi, Elder & Ben, (1988) found a relationship between introvert in childhood and coping with various developmental tests in adulthood. As grown-ups, introvert boys had, among other things, delayed access to a stable career path and to mirage and fatherhood, but no psychopathological problems. No such delays manifested themselves with introvert girls. A comparison study in Sweden produced similar findings (Kerr, Lambert & Bem, 1996), with the difference that introvert boys in this case suffered no career setbacks. As grownups, on the other hand, introvert girls achieved a lower educational level as their extrovert counterparts. The relevant data is presented in tables 4.1 and 4.2.

Table 4.1 Crosstab of Gender and Personality

			PERSONALITY		Total
			Introvert	Extrovert	
Gender	Male	Count	57	60	117
		% of Total	28.5%	30.0%	58.5%
	Female	Count	43	40	83
		% of Total	21.5%	20.0%	41.5%
Total	Count	100	100	200	
			50.0%	50.0%	100.0%

Source: Fieldwork, 2012

From Table 4.1 it can be observed that out of the total male respondents from which the data was gathered, 28.5% were introvert while 30 % were extroverts. This indicates that more males exhibit extrovert characteristics than extrovert characteristics. With regards to the female respondents 21.5 % were introverts while the remaining 20 % were extroverts. This shows that more females also exhibit

introvert characteristic in comparison to those showing extrovert characteristics. It can therefore be inferred from this statistics that males are more geared towards extrovert personality while females are more geared towards introvert characteristic.

To establish the relationship between gender and personality a Chi square test was used as shown in Table 4.2.

Table 4.2 Chi-square Test on Gender and Personality (Introverts and Extroverts)

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.185 ^a	1	.667
Continuity Correction ^b	.082	1	.774
Likelihood Ratio	.185	1	.667
Linear-by-Linear Association	.184	1	.668
N of Valid Cases ^b	200		

Source: Fieldwork, 2012

The Chi square results as can be seen from Table 4.2((1 = 0.185, P= .667) indicates that there is no statistically significant association between gender and personality (Introvert and Extrovert) of college students-trainees. This shows that both male and female equally exhibit introvert and extrovert character traits. This is in sharp contrast with a correlational study by Mayer,(1992) and Bowen et al., (1995). In their sample survey of 3-6 year-olds, negative correlation was found between introvert and socio-metric nominations by peers strictly with boys four years or older. Introvert boys received fewer positive motivations, but no more rejection than their extrovert counterparts. On the other hand, introvert did not affect the girls' nominations (Mayer, 1992). In a longitudinal section study by Bowen, Vitaro, Kerr and Pelletier (1995), it turned out that introvert as rated by Kindergarten classmates of the same age likewise was a predictor for internalizing problems in the fifth grade.

As these studies have demonstrated, it could be inferred that introvert socially inhibited behaviours are manifested primarily by boys, to their disadvantage. Introvert contradicts the male stereotype more than the female stereotype. Boys must therefore not only deal with their own social inhibition, but also with a lack of social recognition. Under the circumstances, the self-conscious

behaviour can even evoke somewhat negative reactions from peers. Such reactions to boys with a typical characteristics increase particularly during the primary school years (Marsh & Shavelson, 1985).

4.3 Relationship between Personality and Academic Performance

2. **H₀:** There is no significant relationship between academic performance and personality of college students.

Academic performance has been linked to various factors including neuroticism, conscientiousness, agreeableness and openness among others which has to do with one's personality (Costa and McCrae 1992, Poropat, 2009). According to Laney & Olsen, (2001), a positive relationship exists between introversion and achievement. They pointed out that introverts are vigilant, stick to task, hardworking, self-sufficient, introspective and analytical which accounts for their success. Observations put forth by famed personality theorist, Hans Eysenck also conclude that introverts appear to possess a greater capacity for concentrated work which may translate into advantages in educational achievements (Eysenck, 1971). To ascertain the relationship between academic performance and the personality of an individual a Pearson' correlation was run as can be viewed from Table 4.3.

Table 4.3 Correlations Introverts and Extroverts and their performance

		Performance in CADL	Performance in PPEC
Introvert Students	Pearson Correlation	-.028	.091
	Sig. (2-tailed)	.779	.369
	N	100	100
Extrovert Students	Pearson Correlation	.109	-.041
	Sig. (2-tailed)	.281	.684
	N	100	100

Source: Fieldwork, 2012

From the study as shown in Table 4.3, it was unveiled that a weak negative relationship exists between academic performance in CADL and student-trainees exhibiting introvert which was not statistically significant ($r(100) = -0.91, P = 0.369$). This implies that academic performance in CADL increases with students exhibiting less of introvert characteristics. A weak positive relationship was also seen in the academic performance in the PPEC and introvert students which was not statistically significant ($r(100) = -0.28, P = 0.779$) either. Furthermore, the study also reveals a weak positive and negative relationship between extrovert student-trainees and their academic performances in CADL and PPEC respectively which was not statistically significantly (see Table 4.3).

The finding shows no significant relationships between introverts and extroverts and their academic performances. This means we fail to reject the null hypothesis of no significant relationship, and that one's introversion does not affect one's academic achievement significantly. On the contrary, Irfani, (1995, p. 197), showed that more extroverts rated themselves more academically successful than introverts. According to this study, the possibility that a student will rate himself academically successful is likely to be greater when the student is extroverted rather than introverted (Irfani, 1978, p. 505). In contrast, another national study found that “stable introverts are the highest academic performers” (Furnham & Medhurst, 1995, p. 197). This study charted the actual degree of academic success and concluded that “introverts predominate among outstanding students” (p. 207). It was

also noted that although introverts are frequently among the top students, the GPA of introverts and extroverts differs only slightly.

Gosling, (2008, p. 40), however, holds the view that the Type ‘A’ introverts tend to be good actors in social settings as compared to their extrovert counterparts. Accordingly, they can readily discuss information and ideas in an ever-expanding number of circumstances, while the Type ‘B’ introverts tend to suffer most terribly because of their communication deficiencies. They are relegated to the most extreme fringes of society and forced to observe in silence and pseudo contentment. He added that the implications to the researcher may be as a result of some environmental factors created by the educational leaders in schools and the teaching methods and techniques adopted coupled with the classroom environment created during instruction and good knowledge background in personality difference.

4.4 Relationship between Introvert Academic Performances and Extrovert Academic Performances.

3. **H₀:** There is no significant relationship between the academic performances of introverts and the academic performances of extroverts

To understand the relationship between the academic performances of introvert and the academic performances of extroverts, their performances in CADL and PPEC were collated which is presented in Tables 4.4 and 4.5

Table 4.4 Descriptive Statistics of academic performances of introvert and extrovert students

Performances based on personality	N	Min	Max.	Mean	Std. Dev.
Performance of introverts in CADL	100	53.00	87.00	71.590	6.25888
Performance of extroverts in CADL	100	53.00	88.00	72.530	6.80382
Performance of introverts PPEC	100	31.00	80.00	64.480	8.68818
Performance of extroverts in PPEC	100	43.00	83.00	66.730	7.37160
Number of observation	100				

Source: Fieldwork, 2012

From the study as shown in Table 4.4, it was gathered that the average scores attained by introvert and extrovert

students in CADL were 71.5% and 72.5% respectively whereas the average scores obtained in PPEC were 64.5%

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and 67% for introvert and extrovert students respectively. It was also observed that the minimum marks obtained by both introverts and extroverts in CADL were 53% while the maximum in the same subject was 87% and 88% respectively. This shows that there was no significant difference in the marks obtained by both introvert and extrovert students. Similar situation was also observed in the academic performances in PPEC subject. The minimum

mark obtained by students exhibiting introverts characteristics was 31% as compared to 43% by extroverts (a difference of just 3%). The maximum score by introvert and extrovert students was also 80% and 88% respectively.

To establish the relationship between the academic performances between introverts and extroverts a Pearson's correction was used as shown in Table 4.5.

Table 4.5 Correlations of introverts' academic performances and extroverts academic performances

		Performance of extroverts in CADL	Performance of extroverts in PPEC
Performance of introverts in CADL	Pearson Correlation	-.111	.010
	Sig.(2-tailed)	.272	.917
	N	100	100
Performance of introverts in PPEC	Pearson Correlation	-.084	.091
	Sig.(2-tailed)	.407	.365
	N	100	100
N		100	100

Source: Fieldwork, 2012

From the study as shown in Table 4.5, it can be observed that a weak relationship was established between the academic performance of introverts and extroverts which were not statistically significant. A negative correlation between introvert academic performance and extrovert academic performance in the CADL was established ($r(100) = -1.11$, $P = 0.10$) whereas a positive correlation was established between the academic performance of introverts and extroverts in PPEC ($r(100) = .091$, $P = .365$). The implication drawn from the correlation analyses between the academic performances of the introvert and extrovert student-trainees indicates that there were no significant differences in the academic performances of both introvert and extrovert college students. This means that the personality (either extrovert or introvert) does not greatly influence the academic performance of college students. Other factors such as time spent in studying, availability of resource materials, teaching skills and understanding of lessons among others may account for the academic performances of college students. Consequently, we therefore fail to reject the null hypothesis of a significant relationship between introverts' academic performance and extroverts' academic performance.

On the contrary, law professors seem to respect introverted law students' need to think before talking by either giving them advanced notice of being called on, advance notice of the questions, or a brief twenty to thirty seconds to think before answering. If professors use one of these routes, introverted students will participate more effectively without increasing their withdrawal. However, professors should encourage introverted law students to participate in class and group activities that help to develop the extraverted side of their personalities. Nevertheless,

despite the Socratic dialogic behaviour emphasis in the classroom, most of the learning in law school occurs outside the classroom in "solidarity reflection" and involves a high degree of reading and verbal reasoning. Consequently, introverted law students are able to study more effectively, since introversion is correlated with reading and verbal reasoning. Further, much of law study involves thinking alone, something introverts do well. Furthermore, since introverts tend to prefer writing over talking, they often do better on written tests on concepts than oral tests on practical application. Consequently, it is not unexpected that introverted law students will have a relative advantage on most law school exams that are more concerned with the students' understanding of concepts. They will also have a relative advantage in obtaining favourable grades since few law professors factor in class participation as a component of the course grade (Marsh, et al., 1988).

On the other hand, "solidarity reflection" can be counterproductive for extraverted law students who prefer to think while acting (or even after acting). Extraverted law students need to be encouraged to make the process of the legal learning environment more active. They need to be encouraged to fill their learning situation with talking and discussion, activity and group work. They can use group discussions, cooperative projects and study groups to more thoroughly understand legal theories. However, they also need to be encouraged to identify experiences where they learn to study effectively alone (Muijs, 1997).

Summary of Findings

From the study it was gathered that more female college students exhibit introvert characteristics as compared to those exhibiting extrovert characteristics. On the other hand,

more of their male counterparts showed extrovert characteristics. Nonetheless, a significant relationship was not established between gender and personality.

The study unveils a weak relationship between academic performance and introvert college students which was not statistically significant. In other words academic performances of introvert college students were not strongly determined because of their personality. A positive relationship was however established between academic performance in CADL and introvert students while a negative correlation was established between academic performance in PPEC and introvert college students.

The study brings to the fore the weak relationship between academic performance and extrovert college students which was not statistically significant. A weak negative relationship was established between academic performance in CADL and students exhibiting introvert whereas a weak positive relationship was also seen in the academic performance in the PPEC and introvert students. From the study, much difference was not recognized between the performances of introverts and the performances of extrovert students. The average scores attained by introvert and extrovert students in CADL were 71.5% and 72.5% whereas the average scores obtained in PPEC were 64.5% and 67% for introvert and extrovert students respectively. A weak relationship was therefore established between the academic performances of introverts and extroverts which were not statistically significant.

Conclusion

The following conclusions were drawn from the study:

1. That a homogeneous population was most likely to exhibit almost similar personality traits and achievements. This helped revealed a negative correlation between extroverts, introverts, and their academic achievements. They performed almost at the same level of achievement in Child and Adolescent Development and Learning and Principles and Practice of Education and Curriculum courses.
2. It was also revealed by the study that female college students are more geared towards introversion than that of their male counterparts. It implied that in the classroom instruction, if both extroverts and introverts are given good instructional environment and attention coupled with effective counselling services, and good leadership styles can perform better in our schools.
3. It was also established from the study that if student-trainees are provided with good learning environment, taking good care of their individual differences and good parental support in their childhood, irrespective of their introversion or extroversion state can do better academically.

Recommendations

Considering the conclusion drawn from the study, the following recommendations are made to guide policy makers, implementers, government, Guidance and Counsellors, stakeholders of education in their work, particularly teaching and learning at the Colleges of Education level.

It is recommended that parents who repress their feelings and/ or emotions and are able to express them without being destructive are more than likely going to raise their wards to express the appropriate emotion in a given situation. Parents are therefore expected to exhibit repressed emotions and also teach their children how to hold back their emotions. A child maybe more of an introvert if they are not allowed to express themselves, as the child that is encouraged to express how they feel is more likely to be an extrovert (Rentfrow& Gosling, 2003).

Lecturers, Tutors, Teachers, and facilitators are to be mindful of the fact that the environment they create during instruction is paramount to cater for personality types in our schools and colleges. Teachers are to be cognizant of individual differences and cater for them as such because introverts and extroverts learn effectively under different instructional environment.

Government as part of its constitutional mandate in providing for its citizens, standard education to meet the human resources the country needs should work through the ministry of education to help implement fully the recommendations made as part of the 2007-Anamoah committee’s report that: Guidance and Counselling should form an integral part of our educational system. Heads and Leaders of our educational institutions from the basic to the tertiary levels are to be educated and enforced to give the trained Counsellors who are posted to their institutions their rightful place to function as such. This would help address most of the personality, socio-personal, educational, and vocational problems in our schools today.

The public must be sensitized to be abreast with the importance and the need to be aware of personality differences and the need to help them develop along those lines. This supports the view that parents with repressed emotions will also teach their children how to hold back their emotions. A child may be more of an introvert if he is not allowed to express themselves, as the child that is encouraged to express how they feel is more likely to be an extrovert.

It is also recommended that future researchers should look beyond conducting a case study so as to cover a good number of Colleges of Education in the country. This would make the study more reliable, valid, and consequently make a generalization of the study for educational policy makers, stakeholders, and government to make informed decisions.

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Teachers should have the same expectations for all students regardless of their abilities. This is because the manner in which teachers treat students in class as expressed in their comments, face-to-face communications, gestures and even the amount of weight-time given to low performing students greatly influence students' self-image and consequently performance.

Positive student relationship should be encouraged in schools because the teachers' role is not limited to teaching; they also act as parents to the student-trainees. Such relationships should be positive, warm and trusting so as to enable students develop positive self-image and attitudes towards school and consequently improved grades. Healthy relationships require trust, self-disclosure, and reciprocity, so that true feelings can be shared. Insecure children seek positive, warm, trusting relationships, but do not have the skills to create them. This means it is up to the teacher to change children's views of relationships and meet their academic and socio-emotional needs.

Parents should be encouraged to improve on their relationship with school staff especially the teachers of their children. They should see themselves as partners in the education of their children. They should know that the advantages of parental involvement and influence are that the children feel happier at school, they play truant less often, obtain better grades and are more likely to continue on to higher education. Also, parental cooperation with teachers promotes children's health, development and welfare.

Schools should implement and enforce strict school rules that guarantee an enabling learning environment. A student's zeal and tenacity to excel sometimes becomes sidetracked by distractions and disruptions in the classroom and school. These disruptions are usually counterproductive and greatly affect performance.

Suggestions for Further Studies

On the basis of this research, recommendations for future studies in the area of examining the relationship between the academic performance of extroverts and introverts in Offinso College of Education on student-trainees as follows:

1. It is recommended that this study be replicated using different personality trait variables such as shyness, coping skills, and self-esteem
2. It is recommended that this study be replicated using high schools in Ghana
3. It is recommended that this study be replicated as a national study.
4. It is recommended that this study be replicated within different school types.
5. Further studies would provide greater impact by focusing on a specific school or set of schools with a deeper investigation of student performance data. For instance, a researcher may wish to study two similar

classes of students who are provided similar instruction, but in differing facilities.

References

1. Achievement: Structural Equation Models of Longitudinal Data. *Journal of Educational Psychology*, 89, 41-54.
2. Allgeier, A. (1981). The influence of androgynous identification on heterosexual relations. *Sex Roles*, 7, 321-330.
3. Allport, G. W. (1961). *Patterns and growth in personality*. New York: Holt, Rinehart and Winston.
4. Alonge, M. F. (2010). *Essentials of research methods and design for educators*. Bolabay publications. 12 Adogun Street, Abule Egba-Lagos.
5. Amatu, H. I. (1981). *What is shyness?* *Psychology*, 18, 30-40.
6. Amedahe, F. K. & Asamoah-Gyimah, E. (2001). *Introduction to educational research*. Module for Centre for Continuing Education, University of Cape coast (CCEUCC) unpublished.
7. Ateel, Saqib, & Ali, (2005). *Personality career tests*.
8. Byrne, W. (1996). *Academic self-concept: Its structure, measurement, and relation to academic achievement*. In B. A. Bracken (Ed.). *Handbook of self-concept*.
9. Bartol & Bartol (2008). *Criminal behaviour: A psychosocial approach*. (8th ed.) Upper Saddle River, New Jersey.
10. Biemer, D. J. (1983). Shyness control. A systematic approach to social anxiety management in children. *The School Counsellor*, 31, 53-60.
11. Buss, A. H. & Cheek, J. M. (1981). Shyness and sociability. *Journal of personality and social psychology*, 41, 2, 330-339.
12. Camperio, A. S., Capiluppi, C., Veronese, A., Sartori, G. (2006). The adaptive value of personality differences revealed by small island population dynamics, *European Journal of Personality*, 21, 3-22.
13. *Child psychology: Social, emotional, and personality development* (5th ed.). VOL. 3. New York: John Wiley and Sons Inc.
14. Chastain, K. (1975). Affective and ability factors in second language acquisition. *Language Learning*, 25, 153-161.
15. Costa, P. T. & McCrae, R. R. (1980). Influence of extraversion and neuroticism on subjective well-being: Happy and unhappy people. *Journal of Personality and Social Psychology*, 38,668. Council for the Gifted Journal, 7, 28-31.

16. Corey, G. (1958). *Theory and practice of group counselling*. California: Brooks Cole's publishing company. Developmental approach (6th ed.). New York: McGraw-Hill.
17. Corey, G. (1982). *Theory and practice of counselling and psychotherapy*. California: Brooks Cole's publishing company.
18. Corey, G. (1992). *Case approach to counselling and psychotherapy* (2nd ed.), New York McGraw-Hill
19. Crowne, D. P., & D. Marlowe. (1964). *The approval motive: Studies in evaluative dependence*. New York: Jon Wiley & Sons.
20. Crozier, W. R. (1990). *Shyness and embarrassment: Perspectives from social psychology*. New York: Cambridge University press.
21. Crozier, W. R. (2001). *Shyness and embarrassment: Perspectives from social psychology*. New York: Cambridge University press.
22. Cummins, J. (1980). The cross-lingual dimensions of language proficiency: Implications for bilingual education and the optimal age issue. *TESOL Quarterly*, 14, 175-87.
23. Depue, R. A., & Collins, P. F. (1999) Neurobiology of the structure of personality: Dopamine, facilitation of incentive motivation, and extraversion. *Behavioural and Brain Sciences*, 22, 491-517.
24. Eysenck, H. J. (1967). *The biological basis of personality*. Springfield, IL: Thomas Publishing.
25. Eysenck, H. J. & Eysenck, S. G. B. (1965). *The Eysenck personality inventory*. *British Journal of Educational Studies*, Vol. 14, No. 1 (Nov., 1965), p. 140 doi: 10.2307/3119050.
26. Eysenck, H. J. (1971). *Readings in extraversion-introversion*. New York: Wiley.
27. Eysenck, H. J. (1981). *A model for personality*. New York: Springer-Verlag.
28. Eysenck, H. J. and S. B. G. Eysenck.(1963). *Eysenck personality inventory*. SanDiego.
29. Fox, N. A., Schmidt, L. A., Rubin, K. H., & Coplan, R. J. (1996). The role of frontal activation in the regulation and deregulation of social behaviour during the preschool years. *Development and Psychopathology*, 8, 89-102.
30. Furnham, A., & Medhurst, S. (1995). Personality correlates of academic seminar behaviour: *Personality and Individual Differences*, 19, 197-208.
31. Gosling, S. (2008). *Snoop*. New York: Basic Books.
32. Gallagher, S.A. (1990). Personality patterns of the gifted. *Understanding our Gifted*, 3, 11-25.
33. Gunnar, M.R., Mangelsdorf, S., Larson, M., & Hertsgaard, L. (1989). Attachment, temperament, and adrenocortical activity in infancy: A study of psycho endocrine regulation. *Developmental psychology*, 25, 355-363.
34. Hoehn, L., & Birely, M.K. (1988). Mental process preferences of gifted children. Naperville, Illinois: Sourcebooks, Inc.
35. Helgoe, Laurie (2008). *Introvert power: Why your inner life is your hidden strength*. Naperville, Illinois: Sourcebooks, Inc.
36. Heist, P. and G. Yonge. (1962). *Omnibus Personality Inventory*. New York: The Psychological Corporation.
37. Irfani, S. (1978). Extroversion-introversion and self-rated academic success. *Psychological Reports*, 43, 505-510.
38. Johnson, D. M. (1983). Natural language learning by design: A classroom experimentation social interaction and second language acquisition. *TESOL Quarterly*, 17, 55-67.
39. Johnson, D. L., Wiebe, J. S., Gold, S. M., Andreasen, N. C. (1999). Cerebral blood flow and personality: A positron emission tomography study. *American Journal of Psychiatry*, 156, 252-257.
40. Jung, C.J. (1921). *Psychologischen typen*. RascherVerlag, Zurich – translation H.G. Baynes, 1923.
41. Kagan, J., Reznick, J.S., & Snidman, N. (1988) Biological basis of childhood shyness *Science*, 240,167-171.
42. Kagan, J. & Snidman, N. (1991). Infant predictors of inhibited and uninhibited profiles. *Psychological Science*, 2, 40-44.
43. Kerr, K., Lambert, W. W., & Bem, D. J. (1996). Life course Sequelae of Childhood Shyness in Sweden: Comparison with the United States. *Developmental Psychology*, 32, 1100-1105.
44. Krashen, S. (1981). *Second Language acquisition and second language learning*. Oxford: Pergamum Press.
45. Kobasa, S. (1979). Stressful life events, personality and health: An inquiry into hardiness. *Journal of personality and social psychology*, 371 – 11.
46. Laney, Martin Olsen (2002). *The introvert advantage: How to thrive in an extravert world*. Workman Publishing.
47. Lasi, H. & Hoffman, M. A. (1982). Causal Attribution of shy subjects. *Journal of Research in personality*, 16,376-385. Microsoft student 2008 DVD.

“The Relationship between the Academic Performance of Extroverts and Introverts in Offinso College of Education on Teacher-Trainees”

48. Leitenberg, H. (1990). Handbook of social and evaluation anxiety. New York Harbinger.
49. Littlewood, W. T. (1983). Contrastive pragmatics and the foreign language learners' personality. *Cross-language Analysis and Second Language Acquisition*, Finland: University of Jyväskylä, 179-187.
50. Mattlin, J., Wethington, E., & Kessler, R. C. (1990). Situational determinants of coping and coping effectiveness. *Journal of Health and Social Behaviour*, 31: 103- 122.
51. Marsh, H. W. (1986) .Verbal and mouth self-concepts: An internal/external frame of reference model. *American Educational Research Journal*, 23, 129-149.
52. Marsh, H. W., & Shavelson, R. J. (1985). Self-concept: Its multifaceted hierarchical structure. *Educational Psychologist*, 20, 107-125.
53. Marsh, H., Byrne, B., & Shavelson, R. (1988). A multi-faceted academic self –concept: Its hierarchical structure achievement. *Journal of Educational Psychology*, 80, 366-380.
54. Martinson, W. D., & Zerface, J. P. (1970). Comparison of individual counselling and asocial programme with inundators.
55. McEwan, K. L. (1983). Perhaps it's time to leave minimal daters alone. *The Behaviour Therapist*, p. 100-101.
56. Muijs, R. D. (1997) .Predictors of academic achievement and academic self-concept-a longitudinal perspective. *British Journal of Educational Psychology*, 67,263-277.
57. Muehlenhard, C. L., & Miller, E. N. (1988). Traditional and non-traditional men's responses to women's dating initiation. *Behaviour Modification*, 12(3), 385-403.
58. Naiman, N., M. Frohlich, H., Stern, & A. Todesco. (1978). *The good language learner. Research in Education No.7*. Toronto: Ontario Institute for Studies in Education.
59. Ofori & Dampson, (2011). *Research Methods and Statistics using SPSS*. Amakom-Kumasi Pacific Groove, C.A. Books/Cole Payless Publication Limited
60. Pavot, W., Diener, E., & Fujita, F. (1990) .Extraversion and happiness. *Personality and Individual Differences*, 11, 1299–1306.
61. Pritchard, D. F. L. (1952). An investigation into the relationship between personalities
62. traits and ability in modern languages. *British Journal of Educational Psychology*, 22,147-148.
63. Pilkonis. A. (1977). The behavioural consequences of shyness. *Journal of Personality*, 45,596-611.
64. Rentfrow, P. J., & Gosling, S. D. (2003). The do re mi's of everyday life: The structure and personality correlates of music preference. *Journal of Personality and Social Psychology*, 84, 1236–1256.
65. Rossier, R. (1976). Extroversion-introversion as a significant variable in the learning of oral English as a second language. Ph.D. Dissertation, University of Southern California.
66. Rubin, K.H., Bukowski, W., & Parker, J.G.(1998). Peer interactions relationships and groups (pp.619 -700). In W. Damon, and N. Eisenberg , *Handbook*
67. Segal, Stephen Rich (1988). *Together Journal of Personality and Social Psychology* Vol. 54, no.6.1031–1039.
68. Scarr, S., & Thompson, W. (1994). Effects of maternal employment and non-maternal infant care on development at two and four years. *Early Development and Parenting*, 3(2), 113123.
69. Sharma, R. S. (1980). Clothing behaviour, personality, and values: A correlational study. *Psychological Studies*, 25, 137–142.
70. Shavelson, R. J., Hubner, J. J., & Stanton, G. C. (1976). Self-concept: Validation of Construct Interpretations. *Review of Educational Research*.
71. Scheibner-Herzig, G., A. Thiele, G. Jelinek, S.& Kokoschka, S. (1984). A study of foreign language achievements and personality variables in 15-year-old pupils.
72. Walster, E., Walster, G. W., Piliavin, J., & Schmidt, L. (1973). Playing hard to get:
73. Understanding an elusive phenomenon. *Journal of Personality and Social Psychology*, 26 (1), 113-121.
74. Zimbardo, P. G. (1977). Shyness can be a quite yet devastating problem, *learning*, 6, 68-70.
75. Zimbardo, P. G., Pilkonis, P. A. & Norwood, R. M. (1974). *The silent prison of shyness* (DNR Tech. Rep. P. 17), Stanford University press.
76. <http://www.psychologytoday.com/blog/evil-deeds/200811/the-therapeutic-power-sleep> (Assessed 5-05 2012)
77. http://www.socionics.us/theory/ext_int.shtml (Assessed 10- 05 2012)
78. Today Magazine article (USA Today, March 2000).