

Introduction

It is widely known in America that education is a culturally significant part of life; historical context must be considered when teaching and developing a generation of young adults. Education is timed honored within individuals to manage behavior of stimuli which will occur under reinforced conditioning of the mind, Skinner, (1953, pg. 402) Learning today has been drastically affected by the catastrophic events of the COVID-19 virus, just as catastrophes of World War II affected adult learners in the 1930's. It is my thesis that undertakes the challenge of: Could the following three assumptions of Malcolm Knowles' andragogy, 1) self-concept of learning (being self-directed in the learning process), 2) experiences in past life circumstances and 3) motivation to learn from the challenges of adult education (GED students) be outdated in reference to two different global catastrophes that imposed social change in the US? This article starts with the initial history of GED learning, then motions into post COVID-19 GED learning, and at a point it segways into the mind of GED learners. Control techniques are discussed to affect the readers understanding of a timely state of affairs, "techniques are used in essentially the same way in controlling the behavior of others", Skinner, (1953, pg. 243).

Literature Review

GED learning in North America started during the Modern era, after the great depression when a higher standard of living, luxury goods, and services were the foundation of social norms. Natural science was being revolutionized by people like

Einstein; theories in quantum mechanics, biology, chemistry, and mathematics opened new frontiers in educational development. For the most part, industries in collaboration with formal educational institutions provided adult learning. With stimulus from the government educational initiatives that hastened during World War II. The advancement in technological changes furthered learning opportunities; causing an increase in companies that gave their employees learning alternatives, Knowles M., (1977, pg .78)

Industrial education heightened adult learning to the point where industry and academia together developed liberal art programs. Companies like IBM, General Motors, General Electric, and Mobil Oil sponsored educational programs to provide specific technical training. These programs offered tuition-free courses for general employees, managerial employees, and supervisory development. University faculty members would teach courses on company premises, classes held on the University's campus was taught by prominent company personnel, students alternated between campus and company classrooms, these educational patterns also happened within America's free public city school systems, Knowles M., (1977, pg .79)

The expression 'adult education' was described by Malcolm Knowles to carry three meanings. First, once students finish their formal schooling both genders continue to keep learning, this explanation debunks GED learners, because GED learners never finished their formal learning. Secondly, to accomplish educational goals mature individuals pursue specific organized activities; GED students fit into this category. Finally, adult education combines learning activities into a movement or field, (1977). A movement in which GED learning has propagated throughout generations.

Milliken describes in *The Last Dropout* how community in schools prevents dropping out of school is a movement to help continue learning activities, (2007, pg., xxvii). A movement to deter students from taking the GED by having them stay in high school to receive their high school diploma.

The establishment of GED testing began during World War II. It was developed to help enlisted veterans return to civilian life to continue their education and vocations. After being discharged, young troops were able to go to college or find substantial employment. Testing programs became structured public policy, shaping innovation by way of the University of Iowa. The educational pioneer Everett Franklin Lindquist established the Iowa test of basic skills (ITBS) which emphasized one's intellectual abilities. During that generation of young people, the test was initially slated for military personnel only. Heroes who tried to stay alive in a total war which involved everyone,

<https://uiopress.lib.uiowa.edu/bdi/DetailsPage.aspx?id=233>

Dealing with the austerity and upheaval of war and attempting to make do; the General Educational Development (GED) helped promote veterans' escapism from the realities of war, giving them hope to return to normal life.

Understanding the culture of World War 2; Germany signed the 'Treaty of Versailles' after World War 1, taking full responsibility for the war, having to pay reparations and reduce its landmass. The league of nations was developed post-World War 1 with the goal of preventing war and promoting democracy. The world spiraled into a state of economic

depression setting the stage for World War 2. After not being able to pay reparations to Britain and France, Germany removed itself from the league of nations - spearheading World War 2. The Germans led by Adolf Hitler thought that attacking the countries it owed money would bring prosperity to Germany, instead, World War 2 begins. Immense worldwide death and destruction pursues, Vengoechea, (2016). The General Educational Development (GED) was administered by the Armed Forces Institute; the test was used as a measurement to determine past educational experiences of individuals with military service, and it evaluated troops to see if they had not completed a formal secondary school education. Decisions were made after the testing to give veterans a high school diploma or an equivalency certificate, even though he had not formally finished high school. These tests weren't validity tested; the tests were not designed to measure educational growth of a single predictor. Though, the test proved to be the best predictor of college grades, Mosel, (2014).

Since 1943 GED testing has been administered to millions prepared in 13 formats. The tests are used for assessing educational development and vocational counseling by industry, high schools, and colleges for individuals who did not finish high school course work. Most states will grant GED students high-school equivalency certificates once they have appropriate test scores. The modules of testing are English composition, social studies, natural sciences, literature, and mathematics. https://scholar-google-com.draweb.njcu.edu/scholar_lookup?title=1955+normative+study+of+the+Tests+of+General+Educational+Development&author=B.+Bloom&publication_year=1956&journal=The+School+Review&pages=110-124&doi=10.1086%2F442296

History has it that the passing rate of the General Educational Development (GED) in 2001 topped one million for the first time. The American Council for Education (ACE) handles the GED testing program, linked hand in hand with the performance indicator provisions of the National Reporting System (NRS). The purpose of the exams was to certify that veterans returning from World War II without a conventional high school diploma had the skills to take advantage of the postsecondary education benefits provided in the GI Bill. <https://www-taylorfrancis-com.draweb.njcu.edu/chapters/edit/10.4324/9781003417958-7/metacognition-cognitive-strategy-instruction-reading-adult-literacy-jennifer-cromley?context=ubx>

During the COVIT-19 pandemic, education was transformed causing significant disturbances in schooling in the U.S.; GED testing had declined drastically. Educational infinitude during the pandemic gave rise to a lack of competent skills when dealing with human relationships. A larger to a max GED learning opportunities momentary ceased in March of 2020-21. Technological advances then changed the way GED classes were delivered. In-person GED classes didn't exist; learners were challenged to receive instruction in the comfort of their home, along with finding a testing center. GED testing was limited, due to the lack of such testing centers. Providing learning across demographic showed that student test scores suffered during COVIT-19, though, Rogers claims that "evidence from these learning used preventively, could aid in the development of mature, nondefense, understanding persons who would deal constructively with future tensions as they arise", (pg. ix). https://www-nber-org.draweb.njcu.edu/system/files/working_papers/w31113/w31113.pdf

Interestingly, young people representation of things in the world lies in a continuous transformation of proportionate learning that occurs as they structurally interact with their functioning neurons and organisms – including the nervous system. Problems emanate which can deter from setting one's goals and continuing the common educational process. These physical changes identify with their learning environment, Maturana, H. & Varela, F, (1987, pg. 170).

These changes are made from that first day of school, the emptying of the nest; commencing the individual quest for lifelong learning, enrichment of the interpersonal vigor that charges with ordinary psychological activities, sparking the inner drive in childhood learners, Mackeracher, (2010, pg.11). A learner includes any person who is trying to acquire knowledge or skills in formal school settings, Higbee, K. (1977, pg. 75).

Genetic factors play an important role in the relationship between neurotransmitters and learning. Receptors are essential for synaptic change which underpins learning, Nonetheless, to induce learning, attention and mediation by other brain mechanisms are needed, Baddeley, Eysenck, and Anderson, (2009 pg. 88).

Childhood sensory receptors in most people are aware of cognitive changes. “The implications of sensory changes for learning are few, particularly when the learning environment provides a wide range of repetitive information in both visual and auditory modes”, Mackeracher, (2010, pg. 28).

Milliken, declares “every young person needs and deserves: a one-on-one relationship with a caring adult, a safe place to learn and grow, a healthy start

and a healthy future, a marketable skill to use upon graduation, and a chance to give back to peers and community”, (2007) .

Education typically positions the haves and have-nots, the functional and dysfunctional. Schooling accompanies age-related changes of sensory acuity, physiological/physical responses, and conscious desires. During the early educational process of meeting new people, making plans with friends and solidifying goals, your desire scenarios cultivate thoughtfulness. Learning is composed of receiving responses from others while being observant of self. Gaining new information is part of the learning cycle which precipitates new experiences and activeness, Learning is interactive, so starting at a young age is paramount to gaining personal power and control of the world around us.

A miraculous property of the brain is memory. It reserves personal experiences while acquiring learned facts and conceptual knowledge. Three key standards are met in memory systems: processes of interrelated brain members that reclaim and stores specific instructions, categorized properties that describe the methods of operation, and dissociated systems that converge psychology and neuroscience evidence, Zigmond, Bloom, Landis, Roberts, and Squire, (1999 pg. 1455).

Memory is produced in the brains' prefrontal cortex specifically manipulating the human learning experience, which is framed by five memory types: procedural memory, episodic memory, working memory, the perceptual representation system, and semantic memory, each procuring collective characteristics that continue to evolve: procedural

memory is not knowing what, but knowing how - the skills and habits acquired through past experiences and practice of motor skills and cognitive aptitude; episodic memory is measured at the place and time of self-reflection and the recollection of personal experiences; working memory comprises of the hours, weeks, and years that information is retain for the long-term; the perceptual representation system role is to identify words and objects, also priming by distinguishing particular parts of an items after being exposed to the whole item; semantic memory is recalling a specific place and time, being familiar with facts and associations, Zigmond, Bloom, Landis, Roberts, and Squire, (1999; pgs. 1458 – 1462).

There has been quite a lot of research done with, but more research is needed in the area of absentmindedness, which is the price the experiencer pays for being able to carry out so many complex activities with only a small investment of conscious attention, we must accept the usually trivial consequences. Note: Prospective memory (the perceptual representation system) contains memory of events in the form of actions that you intend to take in the future; Retrospective memory (procedural memory) concerns memory for past events, things we have learned in the past – in general the memory is unreliable, Higbee, (1977, pg. 209).

Absentmindedness consists of having memory lapses, when someone fails to remember to do something they intended to do, then there's a failure to retrieve stored information from the past. This attempt at memory retrieval deals with memory of your own actions rather than memory for other information. Forgetting what you did and checking continuously can be seen as a compulsive disorder, but in milder forms it is also very

common among normal people. These memory lapses happen because of stress, Higbee, (1977, pg. 205).

In the missingness of instantaneous satisfaction, or instant gratification. It's found that a good number of GED students' fate in this generation is grounded in the degree of work applied to obtaining their educational goals. A strategy for handling memory is to incorporate the intended action in the regular stream of daily activities. Most seem to have come to the idealization that it's not worth putting in the study time. Which accounts for their lack of motivation. Robbins & Everitt points out, "the degree of motivation can be assessed by the capacity to work for a goal", Zigmond, Bloom, Landis, Roberts, and Squire, (1999, pg. 1245).

Therefore, when your mind is on something else while being involved in a task you need to remember, absentmindedness creeps into your unconsciousness. If your attention is focused on what you are doing, there is a greater likelihood that you will later be able to remember having done something, Ornstein, Pajak, & Ornstein, (2015, pg. 210). Basic meditation techniques of being fixated with pointedness on transcended thoughts having your eyes open or close while adopting and being attentive to the sounds of a mantra can bring your attention back to focus. Paying attention to a mantra can redirect idle thoughts. Human consciousness cannot focus on multiple entities at the same time. Meditation allows for a resting state of mind which detaches your thoughts objectively, Goswami, A., (1993, pgs. 243-244).

The concept of Andragogy was postulated by the American adult educator and esteemed author Malcolm Knowles. He asserted that there are andragogical assumptions for adult learning that differ from pedagogical childhood learning. This presumption stems from the German educator Alexander Kapp, who coined the term andragogy in 1833. Initially the term andragogy was to convey the structure of the adult learning experience, Loeng, S., (2018).

Malcolm Knowles andragogical assumptions are, 1) The need to know how what's being learned will affect the individual's everyday life. 2) Readiness to learn in the pursuit of gaining knowledge. 3) Self-concept of learning, being self-directed in the learning process. 4) Motivation to learn from feeling the pressure of world events. 5) Experiences in past life circumstances. 6) Orientation to learn through personal planning and maturity, Taylor, B., & Kroth, M., (2009).

This study insists that ambiguities exist within three of Malcolm Knowles' meanings of adult education compared to today's GED learning. The first and third of his meanings above have negative connotations towards the perception of GED learning, and the second of his meaning seems to support the GED learning experience. Having years of practical experience teaching GED students in the realm of adult educational learning in Newburgh, NY gives me insight in understanding of these ambiguities.

A powerful teaching/motivational technique as an adult educator is to give individual instruction, when this happens it gives the adult learner the opportunity to understand the commitment to their educational interest. Optimistically, this appears as a

novelty, but it dramatically sets apart the real world from the learning environment, Wlodkowski, R., (1999, pg. 104). Motivation is purposeful with the intent to systematically direct behavior, having a response to one's internal or external milieu, guaranteeing their own or cooperative group's survival and satisfaction, Mackeracher, (2004, pg. 131). Teaching consists of direct reinforcement to include presenting a nuance of activities, the imposition of benevolent corrective feedback to incorrect responses, and participating in and administrate student's covert and overt activities, Ornstein, Pajak, & Ornstein, (2015, pg. 90).

Majority of adults don't live in a world that is based on academic disciplines, rather, they live in context where they must apply what they have learned in practical situations, though, Mackeracher explains, "Past experiences and prior learning may be resources that hinder new learning", (pg. 9). People have the tendency to think the same about the meanings of experiences and their perspective on being a good person. Having agreement on meaning can be a problem in social groups, because generally the dominant person of the social group actualizes the meaning. Unless we enquire about someone else's meaning of thought we make assumptions, Mackeracher, (2010, pg. 10). Therefore, Malcolm Knowles' assumption of the Andragogical ideal 'Experiences in past life circumstances' practicality can be challenged.

Adult learners seeking their GED realize the brute facts that knowledge exists independently of them. They understand the perception of dysfunctionality, the ball and chain effect that hinders them from achieving personal success. Adapting this point of view

motivates them to attend GED classes. By all intents and purposes motivation is controlled by emotions, which is associated with cultural beliefs, Galbraith, M., (1990 pg. 143)

Adult learning is understood with the perspectives identifying the levels of learning, Mezirow, (1991).

GED students have tendencies to learn better in teacher center environments, because they communicate their educational needs better in participatory learning where their development is supported in a warm welcoming environment, Brookfield, S., (1986, pd. 132).

The link between the brain's ventral striatum and amygdala structure is salient in the motivational stimuli effects, Zigmond, Bloom, Landis, Roberts, and Squire, (1999; pg. 256). This is essential to this study, because the behavior of GED students brings into question whether they are motivated to commit themselves throughout the entirety of the GED learning process. Here is where absenteeism comes into play. The GED program in which I teach is government regulated. Students are required to receive a monthly educational packet. They work through the packet and reach out to me or come to class when they need assistance. Wlodkowski states, "However, we may produce needless casualties if we are inflexible about accommodating adult learners who would be able to exhibit understanding but cannot because the learning environment restricts them to paper-and-pencil assessments", (1999, pg. 18)

Depression during the COVID-19 pandemic was caused by social isolation, link to mental health issues involving stress. Accompanying with uncertainties about GED learning and testing. The pandemic affected every household because of the initial uncertainties about the virus itself. The medical community was unsure how to handle Covid- 19. This within itself took a toll on the mental health of the majority of people around the world. My personal experience found a number of GED students were not prepared to learn over Zoom. Some had to use their phones, which cause problems when the files were too large. The stress of infection prevention and control measures by lockdowns, self-isolation, and quarantine. Many GED students lost their jobs during Covid-19, so forcing on school work was stressful and depressing.

Methodology

Qualitative Descriptive Research Study with Empirical strategies

Research Question:

Could the following three assumptions of Malcolm Knowles' andragogy, 1) self-concept of learning (being self-directed in the learning process), 2) experiences in past life circumstances and 3) motivation to learn from the challenges of adult education (GED students) be outdated in reference to two different global catastrophes that imposed social change in the US?

Participants:

MEANS AND STANDARD DEVIATIONS OF 304 ARMY ENLISTED TROOPS

MEANS AND STANDARD DEVIATIONS COVID-19 DEPRESSION RISK GROUP

I used empirical generalizations of these two datasets to compare the measurement of the means.

The independent variables Knowles assumptions to compare educational theories using empirical generalizations as predictions of validity of his assumptions.

Knowles assumption of 'Self-concept of learning' is challenged above by Wlodkowski when he talks about an adult educator giving individual instruction, as the adult learner has the opportunity to understand the commitment to their educational interest. Also, it noted that this is presented as a novelty, but it is set apart from the real world's learning environment, (1999, pg. 104). Knowles' assumption 'Motivation to learn', points toward the adult learners being pressured from real world events, on the other hand Ornstein, Pajak, & Ornstein, hints that motivation points away from the adult learner, by stating that direct reinforcement includes presenting a nuance of activities, to corrective feedback to incorrect responses, with participation in administering student's covert and overt activities. Malcome Knowles assumption 'Experiences in past life circumstances', is contested by Mackeracher's quote "Past experiences and prior learning may be resources that hinder new learning", (2010). Understanding perspectives can be uncommon, and at the same time provide answers to some, Ross, (2006, pg. 279)

In stress among minorities, COVID-19 had more of a devastating effect on lively hoods, especially in inner city neighborhoods. GED students from these communities were affected with greater extent it came to being able to attend classes. The depressing and stress of these students were heightened during COVID-19.

References

Brookfield, S., Understanding and Facilitating Adult Learning, Jossey – Bass, USA

Galbraith, M., (1990), Adult Learning Methods, Krieger Publishing Co., USA 3rd Edition

Goswami. A., (1993), The Self-Aware Universe, Penguin Putnam Inc., USA

Higbee, K. (1977), Your Memory, Da Capo Press, USA, 2nd Edition

Knowles, M., (1977), A History of the Adult Education Movement in the US., Krieger Publishing Co. Inc., USA, 2nd Edition

Loeng, L., (2018), [Full article: Various ways of understanding the concept of andragogy](#)

Mackeracher, D. (2010), Making Sense of Adult Learning, University of Toronto Press,
Canada, 2nd Edition

Mezirow, J. (1991), Transformation Dimensions of Adult Learning, Jossey-Bass, USA

Maturana, H. & Varela, F., (1989), The Tree of Knowledge, Shambhala Publications, USA

Milliken, B., (2007), The Last Dropout, Hay House Inc., USA

Mosel, J. (2014), [The General Educational Development Tests \(high school level\) as a predictor of educational level and mental ability](#)

Ornstein, A., Pajak, E., & Ornstein, S., (2015), Contemporary Issues in Curriculum, Pearson,
Inc. USA, 6th Edition

Rogers, C., (1961), On Becoming A Person, Houghton Mifflin Company, USA,

Skinner, B., (1953), Science and Human Behavior, The Macmillan Company, Canada

Taylor, B., Kroth, M., (2009), Andragogy's Transition into The Future, Journal of Adult
Education, Volume 38, Nu. 1, USA

Vengoechea, X., (2016), Everything You Need to Ace World History, Workman Publishing
Co., USA

Wlodkowski, R., (1999), Enhancing Adult Motivation to Learn, Jossey-Bass Inc., USA

Zigmond, Bloom, Landis, Roberts, and Squire, (1999), Fundamental Neuroscience,
Academic Press, USA