

Cogent Education (2018), (Article 1), this article is a descriptive analysis using written material, reports, articles, and books. It covers multiple explanations of the andragogical learning concept. It mentions the main andragogical research contributors, along with the dates and times of the historical development of andragogy. The article elaborates on the parts of the globe in which various andragogical reasoning took hold within the learning community. The analytical techniques used are explanatory, in which experimental methods can be incorporated.

Major findings in this article are three humanistic variants of the andragogy approach accumulated into three phases: classical humanism, dialogical humanism, and romantic humanism; this categorical data can use multiple regression as an inferential statistical measurement.

First, Kapps' andragogy classifies as classical humanism was led by the Greek philosopher Plato from the 1930's. Secondly, during the interwar period of the 1950's the concept of andragogy termed dialogical humanism was carried over from the aspects of pedagogy. Malcolm Knowles and his andragogy of the 1970's and 80's is a more individualistic orientation; romantic humanism was the psychology of the 1960's.

The research question ask, How does andragogy relate to a historical and profession perspective? The subsidiary question ask, How does the reader take criticisms of Knowles assumptions?

Article 2, Andragogy of Hope and Learning Cities, using hope as motivation to strive to develop courses within learning cities, providing opportunities for building learned ecosystems that tackle complex issues of transformative learning, which will realign one's generational quality of life. The variables of hope and hopelessness can be compared using inferential statistics. Using a survey to collect information about a population that has hope and a population that has develop hopelessness and using the Mann-Whitney test to evaluate the two conditions.

The major findings in this article are addressing global pandemics and climate change, while taking collective learning and actions of a group, community, and societal scales, as well as, at the individual, also, transformative thinking cultivates sustainable and resilient cities that interconnect a web of learning opportunities. Individualism can cause unsustainability in learned cities; therefore, the collective nature of learning networks should be recognized for lifelong learning. Knowles assumption emphasizes individualism and collaboration causing a contradiction for learned cities.

The research question ask, How does learned cities move forward? The subsidiary question ask, How does the reader take criticisms of Knowles assumptions?

Applications of Andragogy in Multi-Disciplined Teaching and Learning, (Article 3), compares Pedagogy to Andragogy using the data collection method of past research for a described analysis, elaborating on multiple definitions by different researchers with different approaches. For example, andragogy used in police training, andragogy used to teach philosophy and andragogy used in training medical registrars.

The Pearson Correlation can be used to measure the degree of a relationship between andragogy and pedagogy.

Major findings are Andragogy contributes to the understanding of how adults learn, in what context, and the process of learning. Moreover, andragogy is the rallying point for separating adult education from other areas of education. Also, note that many other studies exist in literature through which one can search and learn about the application of andragogy in other contexts.

The research question ask, How does andragogy and pedagogy relate to history? The subsidiary question ask, How does different contexts of andragogy define learning?

Article 4, It Does Matter How We Teach Math, a described analysis that distinguishes the theoretical constructs of adult education within the college math learning environment. The assumption of Knowles andragogy is elaborated on in extensive details. The foundation of the article is centered around Knowles andragogical research. Empirical research was used with the data collection method of observation.

Hypothesis test can be used for this research population, sample data can be drawn for the population of 200 student participants.

Major findings:

First, adults understand what they need to know, and instructors need to take this into consideration when developing lesson plans.

Students should be given comprehensive knowledge of what it takes to pass these math classes to determine their learning outcomes.

Secondly, the student is responsible for their own success or failure, their self-directed learning should have them be active benefactors of the learning process.

Thirdly, students' experiences are a very important step in adult learning. Provided the classroom environment is set up where they can collaborate with each other.

Fourthly, the learner should be ready to learn. Therefore, learning experiences need to correspond to times when the student is ready to learn.

Fifthly, problem-center learning motivates adults, if they know what they are learning will immediately apply to their lives.

Sixthly, external motivators are helpful, but internal motivators have more credibility with adult learners. The desire to advance in life helps with adults' self-esteem.

The research question asks, How does andragogy help in teaching math? The subsidiary question asks, How does the student learn mathematical concepts via andragogy?

Andragogy's Transition Into The Future: Meta-Analysis of Andragogy and Its Search for a Measurable Instrument, (Article 5). The article explains the history of andragogy by describing Knowles' andragogical assumptions by way of past research. The article also presents criticisms directed toward Knowles' andragogical assumptions. The data collection method would be focus groups. A synthesis outcome states the measuring instrument 'Guglielmino's instrument' but does not give details about how to make the measurements.

Major finding - an instrument needs to be created to measure whether andragogical assumptions are being incorporated in instructional settings, an instrument that provides a formative assessment of Knowles' assumptions.

The research question asks, How is andragogical learning measured? The subsidiary question asks, Will researchers eventually be able to measure Knowles'?

References

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