



## Students' Perceptions on the Practices of Andragogical Principles: A Case of Teacher Education Institution Situated in Lahore

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### ABSTRACT

*Andragogy as an arts and science of teaching adults, advocates that adults learn differently from child learners and both have different magnitude of learning experiences. Adult students are self-directed and need to know before learning something as compare to child students. The main purpose of this paper is to identify the students' practices of andragogical principles in a public sector teacher education context. The quantitative survey research design was carried out to collect the data. Population were comprised all male and female students studying in year I and year II of B.Ed. (Hons) program from a public sector teacher education institution. Total 167 (46 male and 121 female) students were the respondents to the questionnaire. A close ended questionnaire was adapted and the reliability of the instrument was ensured by Cronbach alpha which was 0.96. The collected data were analyzed by one-sample t-test and independent sample t-test. Analysis of the results suggested that students did not aware with the Andragogical principles. There was a significance difference exist in the practices of male and female students. Male students perceived andragogical practices slightly higher than the female students. Whereas, no significant difference exist in the andragogical practices of year I and year II students from B.Ed. (hons.). It is recommended that teachers may provide awareness to the students about andragogical adult learning principles and also adapt andragogical approach for teaching adults. It is also recommended that teachers may provide andragogical orientations and learning environment, especially for those students who are newly joined teacher education institutions.*



### Introduction

Andragogy is consider as a method, a theory, an approach, a philosophy, a set of principles, and a set of assumptions for the practice of adult learning (Caruth, 2013). The theory of andragogy provide adult learning principles and according to these principles adult students learn differently from the child students and their learning need are also different from each other (Knowles, 2005). The andragogical adult learning principles advocated that self-concept of the adult learners is autonomous, independent and self-directed (Knowles, 1984). Being an adult, his self-consciousness shifted from being one of a dependent personality to being one of a self-directed adult learner. Adult learners need to know before attending a learning activity, they need to know why a particular concept is important to what they are currently doing. Knowles's (2005) andragogical principles stresses on the importance of adult students to know why they need to learn something before learning something (Kaufman, 2015). Adult students are ready to learn if

they find something more worthy for their academic or professional needs. Andragogical principles advocated that an adult learner have prior experiences, and these prior experiences as a source for their learning that is important to them (Knowles, 1984). As compare to child learner, adults join higher education institutions with recollections of experiences and these experiences playing an important role in their learning. An adult learner is internally motivated to learn something. Orientation to learning for an adult is life-oriented or problem-oriented (Knowles, 1984). Numerous studies show that teacher education institutions were utilizing pedagogical approaches to teach the adult students. Which was not appropriate for adult students. There is a need to change from pedagogical approach to andragogical approach for adult students. Therefore the present study was designed to investigate the student's perceptions regarding the practices of andragogical approach at teacher education institution of a public sector university, situated in Lahore.

### **Literature Review**

The purpose of teacher education institutions is to provide personal and professional development to adult individuals (Alam, 2021). Teacher education institutions are responsible for the personal, social and economic developments of the adults and produce qualified individuals that are able to contribute in the economic growth of a country (Chan, 2016). An individual can perform better if their personal and social need are accomplished. Knowles (1984), proponent of adult learning theory andragogy, stated that adults learn something more deliberately if it is apply to their life immediately. Therefore, teacher education institutions need to be pay more attentions to the learning needs of adult students (Alam, 2021; Mbunda & Ojwang, 2021).

Mbunda & Ojwang (2021) argue that teacher education institutions have less practices of andragogical principles for the adult students. As a solution to this problem Crauth (2014) stated that teacher education institutions may practice andragogy for the effective teaching and better learning of adults. According to Alam (2021) andragogy, as an approach to teach adult learners is not utilized in higher education institutions, rather, higher education institutions are utilizing pedagogy as an approach to teach adult learners (Alam, 2021; Mbunda & Ojwang, 2021). Pedagogy as an approach to teach adult students is not appropriate to fulfil the todays learning needs and demands of personal, academic and social development of the students. Currently, learner-centered approaches are not frequently practice by the teachers to actively involve the students into their learning environment (Mbunda & Ojwang, 2021; Rubayat & Imam, 2021). According to Seyoum & Basha (2017) one possible reason for this gap is that teachers and students have less awareness about the utilization of andragogical adult learning principles. Moreover, teachers mostly utilized lecture-method and teacher-centered approaches and these approaches are less productive for adult students. They also have less opportunity for collaborative exploration of different perspectives of adult students (Alam, 2021). Kapur (2015) stated that rather than following 'didactic approach' Andragogy stresses 'problem-centered approach' where equality exists between the teacher and students. Purwati et al. (2022) asserted that adults learn best when they have control over their learning and in andragogy the focus shifts from the teacher to the learner Alam, 2021; Purwati et al., 2022).

To Panacci (2015) there is no efforts on the part of the teachers to make some links between the learners' experiences and the topic discuss under the lecture methods or teacher-centered approaches. The learning methods that may actively involve the adult learners into their learning environment were not frequently practice by the teachers (Alam, 2021; Rubayat & Imam, 2021). Adult learners face many challenges from the commencement their degree to the end of their degree program (Hunter-Johnson, 2017). Owusu-Agyeman (2018) asserted that educational programs for adult students organized by the higher education are not appropriate to encounter the educational needs of the adults (Owusu-Agyeman, 2018).

Pakistan as a developing country faces many challenges and problems to maintain quality education. In this regard many researches consistently indicate that teacher education institutions in Pakistan used traditional teaching and learning approaches for which were not fulfil the learning needs of the adult students (Abiodullah et al., 2017; Gul & Shah, 2019; Tasdemir et al., 2020). Therefore to compete the international standards of quality education there is a need for a change in present conventional teaching approaches to advance teaching approaches for students. Similarly, there is need to change teacher-centered approaches to learner-centered approaches in higher education institutions. Moreover, there is also a need for an introduction of an appropriate teaching and learning approach for the adults. For this purpose present study was designed to identify the extent to which adult students in higher education institutions perceive themselves as an adult learner and to what extent they practice andragogical principles for their learning in higher education institutions. The present study is significant for the teachers that are teaching in higher education institutions and the adult students who are studying in higher education institutions. The present

study also beneficial for policy makers, administrative and managerial departments of higher education institutions for the improvement of educational process from the perspective of adult students.

### Objectives of the Study

The objectives of the study were to:

1. To measure the students' perceptions on their practice of andragogical adult learning principles at teacher education institution
2. To analyze the differences in the perceptions of students on their practice of andragogical adult learning principles on the basis of gender and year they studied in teacher education institution

### Research question of the study

Following were the research questions of the study:

1. To what extent students perceive andragogical practices of adult learning principles at teacher education institution?
2. What are the difference in students' perceptions regarding the practices of andragogical adult learning principles on the basis of gender at teacher education institution?
3. What are the difference in students' perceptions regarding the practices of andragogical adult learning principles on the basis of year they studied in higher education institution?

### Delimitations of the study

The present study was delimited to the teacher education institution that was situated in Lahore. The present study was also delimited to the students of year I and year II of B.Ed. (hons) program

### Research Methodology

The purpose of study was to measure the perceptions of students about the practice of andragogical adult learning principles for their learning. The present study was quantitative in nature. The quantitative survey research design was used to collect the data from students. The survey research design allows the researcher to collect data by the use of a questionnaire from a sample drawn from a well-defined population (Gay et al., 2012; Nardi, 2018; Visser et al., 2000). All male and female students from year I and year II (315) of B.Ed. (Hons) from a public university located in Lahore were the population of the study. Students from B.Ed. (hons) were accessed by convenience sampling technique. Etikan et al. (2016) stated that it referred to the researching subjects to the population that are easily accessible, available at time and willing to participate in study. The respondents to the survey was 167 (46 male and 121 female). A structured questionnaire were adapted for the study. Andragogy in Practice Inventory (API) as an instrument were adapted from Holton (2015) to measure the students' perceptions regarding the practices of andragogical adult learning principles for their learning. API was developed around 6 adult learning principles of Andragogy. These principles are (a) self-directed learning, (b) readiness to learn, (c) need to know, (d) experience of learner, (e) motivation of learner, (f) orientation to learning. Validity of the instruments were insured by the expert opinions. The reliability of the instrument was 0.96 which were checked by applying Cronbach's Alpha.

### Data Analysis

Collected data were analyzed by One Sample *t*-test and Independent sample *t*-test using SPSS software.

### Results

**To what extent students practice andragogical adult learning principles at teacher education institution?**

**Table 1**

*Summary of Individual Andragogical Principles*

Principles of andragogy	Mean	SD	Mean Difference (Cut-off value=3)	<i>t</i>	<i>p</i> -value	Effect Size Cohen's <i>d</i>
Self-directed learning	3.07	.999	.073	.955	.341	.0738
Readiness to learn	3.27	.654	.274	5.420	.000	.41
Need to know	2.93	.820	-.068	-1.073	.285	.083
Experience of learner	2.95	.611	-.049	-1.043	.298	.080
Motivation to learn	3.27	.580	.270	6.017	.000	.50
Orientation to learning	3.22	.725	.221	3.945	.000	.30
Overall	3.11	.620	.112	2.351	.020	.18

Table 1 shows the overall mean value 3.11, which is around the cut-off value 3 and their respective *p*-value is smaller than 0.05. Student were neutral for the adult learning principles because the mean value is

around the cut-off value 3. As per Cohen's criterion (as cited in Morgan et al, 2011) for interpreting effect size, it can be noticed that the effect size of the items related to andragogical principles is small (less than .20). It can be concluded from the analysis of the results students did not disagree with the items of andragogical principles, however their practices of adult learning principles were less.

The mean value of individual adult learning principles, which is around the cut-off value 3. Except, 'need to know' and 'experience of learner' their respective mean values are slightly lower than the cut-off value. It shows that students were agreed or neutral for adult learning principles. As per Cohen's criterion (as cited in Morgan et al, 2011) for interpreting effect size, it can be noticed that the effect size of the items related to six andragogical principles is varied from small to medium (less than .20 to around the .50). Andragogical principles of 'self-directed learning', 'need to know' and 'experience of learner' have less than smaller effect size. Principles of 'readiness to learn' and 'orientation to learning' having an effect size of .41 and .30 which is a smaller effect size according to Cohen's criterion. Whereas the principle of 'motivation to learn' have an effect size of .50 which is a medium effect size. It can be concluded from the above table that students practice the andragogical principle of 'motivation to learn' for their learning more than the other andragogical adult learning principles.

**Table 2**

*Summary of Individual Items related to Self-directed Learning*

Items	Mean	SD	Mean Difference (Cut-off value=3)	t	p-value	Effect Size Cohen's d
1-Learn for personal satisfaction	3.02	1.151	.024	.269	.788	.020
2-Broadening knowledge and skills	3.08	1.179	.084	.919	.360	.071
3-Assess weakness and identify developmental need	3.15	1.144	.150	1.691	.093	.13
4-Identify my learning need	3.23	1.321	.234	2.289	.024	.17
5-Adapt learning experiences according to capabilities	3.14	1.156	.138	1.540	.126	.11
6-Help to diagnose needs for further learning	3.15	1.259	.150	1.536	.126	.11

The above table 2 shows the individual items of self-directed learning. All the items have their mean values in ranges from 3.02 to 3.23. As per Cohen's criterion (as cited in Morgan et al, 2011) for interpreting effect size, it can be noticed that the effect size of the items related to self-directed is small which are less than .20.

**Table 3**

*Summary of Individual Items related to Readiness to Learn*

Items	Mean	SD	Mean Difference (Cut-off value=3)	t	p-value	Effect Size Cohen's d
7-learning assist in resolving work or life problem	3.39	1.181	.389	4.257	.000	.32
8-mastery of this material will benefit life or work	3.67	.802	.671	10.801	.000	.83
9-learning could help to address real task or problems	3.53	1.107	.533	6.219	.000	.48
10-knowledge immediately applied to life or work	3.54	.998	.539	6.975	.000	.54
11-Made the decisions about how learning progressed	3.39	1.176	.389	4.279	.000	.33
12-learning was necessary for the challenge I face	3.29	1.193	.287	3.114	.002	.24
13-steps were taken to adapt learning experience	3.46	1.096	.455	5.366	.000	.41
14-learner and teacher cooperated in planning the learning	3.27	1.055	.269	3.300	.001	.25
15-teacher act as a rich source for learning	2.71	1.121	.293	-3.382	.001	.26
16-teacher and learner collaborated in planning the learning	3.23	1.298	.234	2.324	.021	.18
17-figure out the best direction for learning and development	3.12	1.161	.120	1.333	.184	.10

The table 3 shows the items related to andragogical adult learning principle 'readiness to learn' and their respective mean values were more than the cut-off value 3. Except the item 15-teacher act as a rich source for learning, their mean value was 2.71 which was less than the cut-off value 3. It shows that students disagree with this item. As per Cohen's criterion (as cited in Morgan et al, 2011) for interpreting effect size, it can be noticed that the effect size of the item 8 and 10 were ranges from medium to large (.50 to .83) Whereas, items 7, 9, and 11 to 15, their effect size ranges between medium (less than .50) as per Cohen's criterion (Morgan et al, 2011). While items 16 and 17 have small effect size (less than 0.20).

**Table 4**  
*Summary of Individual Items related to Need to Know*

Items	Mean	SD	Mean Difference (Cut-off value=3)	t	p-value	Effect Size Cohen's d
18-feel responsible for own learning	3.38	1.150	.383	4.307	.000	.33
19-teacher helped to understand why the learning methods were right	2.92	1.083	.084	-1.000	.319	.07
20-teacher explained how this learning helped to deal with changes in life	3.41	1.238	.407	4.251	.000	.32
21-steps were taken to clear how learning would fit my need	2.95	1.184	.054	-.588	.557	.04
22-I had a role to play in my own learning	2.87	1.159	-.132	-1.468	.144	.11
23-learning gave me confidence I needed	3.04	1.194	.042	.454	.651	.03
24-I was given exercise or activities that prepare me to learn	2.88	1.241	.120	-1.247	.214	.09
25-learners helped to explore and apply new knowledge or skills	2.95	1.201	.048	-.515	.607	.03

Above table shows the items pertaining to 'need to know'. The items 18 and 20 have mean values 3.38 and 3.41, which was more than the cut of value 3. Their respective *p*-value is less than .05 ( $p < .05$ ). Remaining items pertaining to the principle 'need to know' have the mean value less than the cut-off value 3. Which shows that students do not agree with these items. As per Cohen's criterion (as cited in Morgan et al, 2011) for interpreting effect size, it can be noticed that the effect size of the item 18 and 10 were ranges from medium to large (.50 to .83) Whereas, items 7, 9, and 11 to 15, their effect size ranges between medium (less than .50) as per Cohen's criterion (Morgan et al, 2011). While items 16 and 17 have small effect size (less than .20).

**Table 5**  
*Summary of Individual Items related to Experience*

Items	Mean	SD	Mean Difference (Cut-off value=3)	t	p-value	Effect Size Cohen's d
26-prior experiences helped in learning	3.14	1.246	.138	1.428	.155	.11
27-I had control over what I had learn	2.74	1.058	.257	-3.144	.002	.24
28-life experiences were a source for this learning	3.04	1.108	.036	.419	.676	.03
29-learning helped to develop knowledge and skills I need at this time	2.90	1.196	.102	-1.100	.273	.08
30-wotk with others to plan our learning	2.96	1.256	.036	-.370	.712	.02
31- developed strong rapport with the learner	2.92	1.247	.078	-.807	.421	.06
32-shared the responsibility for planning the learning process	3.06	1.334	.060	.580	.563	.04
33-learners were partner with the teachers	2.79	1.161	.210	-2.333	.021	.18
34-climate was collaborative	3.06	1.352	.060	.572	.568	.04
35-negotiated the learning objectives	3.18	1.184	.180	1.961	.052	.15
36-work together to design learning activities	2.77	1.118	.228	-2.631	.009	.20
37-teacher relied heavily on lecture	2.68	1.053	-.317	-3.894	.000	.30
38-evaluation methods were appropriate	3.04	1.202	.036	.386	.700	.02
39-learning methods actively	3.34	1.334	.335	3.249	.001	.25
40-work together to make decisions about how learning would occur	3.17	1.251	.174	1.793	.075	.13
41-evaluation methods met my needs	3.39	.993.1	.389	5.065	.000	.39.

Above table shows the items pertaining to the principle 'experience of learner'. The items 26, 28, 32, 34 35 and 38 to 41 have their mean values around the cut-off value 3. Except the items 27, 29 to 31, 33, 36 and 37, their mean values were less than the cut-off value 3. Similarly, their effect size rages from medium to small (Less than .50).

**Table 6**  
*Summary of Individual Items related to Orientation to Learning*

Items	Mean	SD	Mean Difference (Cut-off value=3)	t	p-value	Effect Size Cohen's d
42-life experiences were a regular part of the learning experience	3.54	1.085	.539	6.418	.000	.49
43-learning helped to meet the changes in life and work	3.42	1.083	.419	5.002	.000	.38
44-adequate dialogues with teacher regarding learning	3.31	1.144	.305	3.448	.001	.26
45-learning expectations were clear	3.01	.928	.006	.083	.934	.006
46-helped in diagnose learning needs	3.11	1.290	.108	1.080	.282	.08
47-worked together to prepare me for this learning	3.50	1.312	.497	4.895	.000	.37
48-learner responsibilities were clarified	3.19	1.400	.186	1.714	.088	.13
49-learner and teacher become partner in setting learning objectives	3.49	1.227	.491	5.173	.000	.40
50-colleboratively design which learning activities would be used	3.32	1.082	.317	3.792	.000	.29
51-adjust the design of learning to fit this situation	2.98	1.159	.018	-.200	.841	.01

The table 6 provide the items related to ‘orientations to learning’ and their respective mean values. The values or all items were around the cut-off value 3, except the item 51, which mean value was less than the cut-off value 3. Their effect size ranges from medium to small.

**Table 7**

*Summary of Individual Item related to Motivation to Learn*

Items	Mean	SD	Mean Difference (Cut-off value=3)	t	p-value	Effect Size Cohen's d
52-learning experience make a positive change in my life or work	3.54	1.063	.539	6.553	.000	.50
53-learn because of the inner fulfillment it provides	3.49	1.176	.485	5.328	.000	.41
54-learn because of the pleasure of discovering new things	3.07	1.120	.066	.760	.448	.05
55-needed this learning at this time	3.77	1.079	.772	9.249	.000	.71
56-set own goals for learning	3.49	.993	.485	6.312	.000	.48
57-learner encouraged to set their own individual learning objectives	3.26	1.168	.263	2.915	.004	.22
58-learner determined what learning objectives to pursue	3.18	1.066	.180	2.178	.031	.16
59-learning activities required full and active participation	3.60	1.270	.605	6.152	.000	.47
60-learning activities required little action on my part	2.58	1.179	.419	-4.595	.000	.35

The above table 7 provide the mean values of the items pertaining to ‘motivation to learn’. All the items have their mean values around the cut-off value 3, except the item 60, which respective mean value was less than the cut-off value 3. Their effect size ranges from large to medium, except the items 54 and 58, their effect size was small, which was less than .20.

**What are the difference in students’ perceptions regarding the practices of andragogical adult learning principles on the basis of gender at teacher education institution?**

**Table 8**

*Gender wise Comparison of Students’ Perceptions about Andragogical Principles*

Variables	Mean		Mean difference	SD		t-value	df	Sig(2-tailed)
	M=46	F=121		M	F			
Self-directed learning	3.53	2.90	.623	1.033	.935	3.736	165	.000
Readiness to learn	3.37	3.24	.131	.750	.613	1.161	165	.247
Need to know	2.93	2.93	.007	.874	.803	-.051	165	.959
Experience	3.10	2.89	.205	.694	.571	1.951	165	.053
Motivation to learn	3.42	3.21	.207	.618	.557	2.083	165	.039
Orientation to learning	3.40	3.15	.243	.765	.702	1.951	165	.053
Overall	3.27	3.05	.212	.685	.587	1.987	165	.049

Table 3 shows that there were significant differences exist between male and female students' perceptions about the practice of andragogical principles. The male (M = 3.2663, SD = .68524) as compare to female (M = 3.1545, SD = .70214) had perceived Andragogy slightly higher level at  $t(165) = 1.987$ ,  $p < 0.05$ . There is significant difference of gender,  $t(165) = 3.736$ ,  $p < 0.05$ . of Self-directed Learning as the male (M = 3.5254, SD = 1.03337) students as compare to female (M = 2.9022, SD = .93509) had reached higher level of Self-directed Learning. There is a significance differences of gender,  $t(165) = 2.083$ ,  $p < 0.05$ . on Motivation to Learn as the male (M = 3.4203, SD = .61794) as compare to female (M = 3.2130, SD = .55714) had reached higher level of Motivation to Learn.

**What are the difference in students' perceptions regarding the practices of andragogical adult learning principles on the basis of year they studied in teacher education institution?**

**Table 9**

*Year wise Comparison of Students' Perceptions about Andragogical Principles*

Variables	Mean		Mean difference	SD		t-value	df	Sig(2-tailed)
	Year I N=88	Year II N=79		Year I	Year II			
Self-directed learning	2.86	3.31	-.452	.924	1.032	-2.988	165	.003
Readiness to learn	3.17	3.39	-.211	.598	.699	-2.102	165	.037
Need to know	2.94	2.93	.012	.807	.839	.093	165	.926
Experience	2.90	3.00	-.103	.543	.680	-1.084	165	.280
Motivation	3.21	3.34	-.131	.537	.620	-1.458	165	.147
Orientation to learning	3.14	3.31	-.170	.683	.765	-1.522	165	.130
Overall	3.04	3.20	-.158	.573	.663	-1.648	165	.101

Above table shows that overall there were no significant differences exist between 1<sup>st</sup> year and 2<sup>nd</sup> year students' perceptions regarding the practices of Andragogical principles as  $p$ -value is greater than .05 ( $p > 0.05$ ). While there is a significant difference exist in 'self-directed learning' as their respective  $p$ -value is less than .05 ( $p < 0.05$ ). Statistically it shows that there is a significant difference exist in the 'self-directed learning' of 1<sup>st</sup> year and 2<sup>nd</sup> year students regarding the practices of andragogical principles. Students of 2<sup>nd</sup>

year perceived 'self-directed learning' more than the students of 1<sup>st</sup> year students.

### **Discussion**

The aim of the study is to investigate the students' perceptions about the practice of andragogical adult learning principles. The analysis of the results show that students have less awareness regarding the andragogical principles. Besides, students were not disagree with them, however, their practice are less about the andragogical principles at public university. From the six principles, students were aware with readiness to learn, motivation to learn and orientation to learning for their studies. Whereas other principles including self-directed learning, need to know and experience of learner were not perceived and practice by the students. In consistent with the findings of the study, Muduli et al., (2018) in their study they concluded that students prefer to andragogical adult learning principles for their learnings at higher education institutions. The theory of andragogy have six adult learning principles (self-directed learning, readiness to learn, need to know, experience, motivation to learn and orientation to learning). Overall, there was a significant difference in the students' perceptions about the practices of principles. Moreover, there were also a high sense of motivation to learn and self-concept as independent learner of male students. Male students have slightly higher level of self-directed learning and slightly higher level of motivation to learn than the female students at the public university. This indicate that male students perceive andragogical practices more than the female students. According to Naz et al. (2020) one possible reason for this difference in male and female students is that male students are externally motivated to learn at higher education institutions of Pakistan. This maybe occur in the culture of Pakistan, because of they have to earn for their families also financially support them (Naz et al., 2020). However, Ekoto and Gaikwad (2015) found that age, gender, field of study, coursework completion did not influence on andragogy of adult learners. The analysis of the results also specified that overall there was no significant differences in the perception of year I and year II students. Findings of the study specified that more experienced students practice andragogical principle of 'self-directed learning' more frequently. Tannehill (2009) also found that in his study students with higher degree programs practice more andragogical principles and they are more aware with adult learning principles. Moreover the results of the present study also verify that adult learning principles were perceived and practice more by the experienced students than the less experienced students. This finding of the study is also consisted with the studies of Brookefield (1984), Knowles, Holton, and Swanson (2011) and Knowles (1984). According to Heidt & Quazi (2013) one reason for this is the experience level of the students increase in the level of the experience can cause the often practices of adult learning principles (Heidt & Quazi, 2013).

### **Conclusion**

The study was design to identify the students' perceptions regarding the practices of andragogical principles. It was concluded that students have less practices about the adult learning principles of andragogy. Students at public university perceived themselves as adult learners, they are ready to learn and internally motivated to learn in higher education institutions. Moreover their orientation to learning were problem-centered and life oriented. Male students were more self-directed and self-motivated for their learnings as compare to female students. Moreover, students from the year II practice principle of 'self-directed learning' for their learning more than the year I students. It was also concluded that experiences students practice andragogy more than those students who were newly joined the higher education institution.

### **Recommendations**

Andragogy is an approach to teach adult students and it is widely accepted by the different countries. While Pakistan is a developing country and it demands for a change in conventional teaching and learning approach to advance teaching and learning approach at teacher education institutions. Based on the findings of the study teacher education institutions may adapt an andragogical approach as whole for teaching and learning of the adult students. Teachers in higher education institutions may practice andragogy and adult learning principles for students by minimizing the gender disparity and providing the andragogical environment to the adult students. Teachers may focus and provide the andragogical orientations, especially to those undergraduate students that newly joined teacher education institutions.

The present study is a type of quantitative survey research, a research can be conducted by combining the both quantitative and qualitative approaches to depict the wider image of andragogical practices of higher education institutions. Additionally, by widening the sample size a research can also be conducted by including the andragogical practices of teachers at teacher education institutions

### **References**



- Alam, M. (2021). Necessity of andragogy in the managerial education programs to facilitate learning of the professionals: A literature review. *Asian Journal of Management Sciences & Education*, 10(1), 1-9.
- Caruth, G. D. (2014). Meeting the needs of older students in higher education. *Participatory Educational Research*, 1(2), 21-35.
- Chan, R. Y. (2016). Understanding the purpose of higher education: An analysis of the economic and social benefits for completing a college degree. *Journal of Education Policy, Planning and Administration*, 6(5), 1-40.
- Ekoto, C. E., & Gaikwad, P. (2015). The impact of andragogy on learning satisfaction of graduate students. *American Journal of Educational Research*, 3(11), 1378-1386.
- Gay, L. R., Geoffrey, E. M., & Peter, A. (2012). *Educational Research: Competencies for analysis and application* (10<sup>th</sup> ed.). Pearson.
- Kapur, S. (2015). Andragogy: The adult learning theory. *Indian Journal of Adult Education*, 76(2), 60-70.
- Kaufman, E. (2015). *Correlation study of adult educators' facilitation experience, professional/academic discipline, and andragogy practice* (Publication No. 3716664) [Doctoral dissertation, University of Phoenix]. ProQuest Dissertations Publishing.
- Klepper, E. M. (2017). *Andragogy and workplace relationships: A mixed-methods study exploring employees' perceptions of their relationships with their supervisors* (Publication No. 10683863) [Doctoral dissertation, Lindenwood University]. ProQuest Dissertations Publishing.
- Knowles, M. S., & Associates. (1984b). *Andragogy in action: Applying modern principles of adult learning*. Jossey-Bass.
- Knowles, S. M., Holton, F.E., & Swanson, A.R. (2005). *The adult learner* (6<sup>th</sup> ed.). Elsevier.
- Muduli, A., Kaura, V., & Quazi, A. (2018). Pedagogy or andragogy? Views of Indian postgraduate business students. *IIMB Management Review*, 30(2), 168-178.
- Mbunda, A. S., & Ojwang, E. A. (2021). Andragogical improvements for effective learning of modules experiencing poor academic performance: A case of the college of business education, Dar Es Salaam. *Business Education Journal*, 10(2), 1-13
- Nardi, P. M. (2018). *Doing survey research: A guide to quantitative method* (4<sup>th</sup> ed.). Routledge. DOI: <https://doi.org/10.4324/9781315172231>
- Naz, S., Shah, S. A., & Qayum, A. (2020). Gender differences in motivation and academic achievement: A study of the university students of KP, Pakistan. *Global Regional Review*, 5(1), 67-75.
- Purwati, D., Mardhiah, A., Nurhasanah, E., & Ramli, R. (2022). The six characteristics of andragogy and future research directions in EFL: A literature review. *Elsya: Journal of English Language Studies*, 4(1), 1-10
- Rubayet, T., & Imam, H. T. (2021). Adaptation of andragogy in the education system of Bangladesh: Emulating andragogical approaches of South-East Asia. *European Journal of Education Studies*, 8(11), 212-233
- Tannehill, D. B. (2009). *Andragogy: how do post-secondary institutions educate and service adult learners?* (Publication No. 3375345) [Doctoral dissertation, The University of Pittsburgh]. ProQuest Dissertations Publishing.
- Visser, P. S., Krosnick, J. A., & Lavrakas, P. J. (2000). Survey research. In H. T. Reis & C. M. Judd (Eds.), *Handbook of research methods in social and personality psychology* (pp. 223–252). Cambridge University Press.