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THE ROLE OF ANDRAGOGY IN PROFESSIONAL DEVELOPMENT AS
PERCEIVED BY EFL INSTRUCTORS IN HIGHER EDUCATION CONTEXT

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July 2024

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ABSTRACT

The Role of Andragogy in Professional Development as Perceived by EFL

Instructors in Higher Education Context

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MA in Teaching English as a Foreign Language

Advisor: Asst. Prof. Dr. Necmi Akşit

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This study explored tertiary-level EFL instructors' perceptions of professional development (PD) activities within the framework of *Adult Learning Principles* and *Process Design Elements*. It also examined whether their perceptions differed based on demographic information or type of higher education (HE). The study employed a cross-sectional survey design, collecting data from 137 EFL instructors working at tertiary-level English language preparatory programs in Izmir. The adapted version of the Adult Learning Principles and Design Elements Questionnaire (ALPDEQ), developed by Wilson (2005), was utilized to collect instructors' perceptions. Both descriptive and inferential statistics were employed along with qualitative analysis of open-ended responses, to address the research questions. The study explored both teacher perceptions and individual differences. The findings revealed moderate agreement among instructors regarding consideration given to *Adult Learning Principles* and *Process Design Elements* in the PD Activities they experienced in their institutions. It was found that instructors' perceptions of professional development varied based on, for example, the type of Master's degree one holds, or type of higher education institution.

Keywords: Andragogy, Adult Learning Principles, Process and Design Elements, Professional Development activities

ÖZET

Yükseköğretimde İngilizceyi Yabancı Dil Olarak Öğreten Öğretim Elemanlarının
Mesleki Gelişimlerinde, Yetişkin Eğitiminin Rolü ile İlgili Algıları

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Bu çalışma *Yetişkin Eğitimi (andragoji) Prensipleri ve Süreç Tasarımı Unsurları* çerçevesinde yükseköğretim kurumlarında yabancı dil olarak İngilizce dersi veren öğretim elemanlarının sunulan mesleki gelişim etkinliklerine ilişkin algılarını incelemeyi amaçlamaktadır. Ayrıca, bu çalışma algıların demografik açıdan veya çalıştıkları yükseköğretim kurumunun vakıf veya devlet üniversitesi olmasına göre değişip değişmediğini incelemiştir. Bu anket çalışmasında, İzmir'de yükseköğretim hazırlık sınıflarında çalışan 137 yabancı dil öğretim görevlisinden veri toplanmıştır. Bu amaçla Wilson (2005) tarafından geliştirilen *Yetişkin Eğitimi (Andragoji) Prensipleri ve Süreç Tasarımı Unsurları* Anketi uyarlanarak kullanılmıştır. Araştırma sorularına cevap vermek için hem betimleyici hem de çıkarımsal istatistik teknikler kullanılmış açık uçlu soruların yanıtları için nitel analiz yapılmıştır. Çalışma, hem öğretmen algılarını hem de bireysel farklılıkları incelemiştir. Bulgular, öğretim elemanlarının, kurumlarında deneyimledikleri mesleki gelişim etkinliklerinde *Yetişkin Eğitimi (Andragoji) Prensipleri ve Süreç Tasarımı Unsurlarına* verilen önem konusunda orta düzeyde fikir birliğine vardıklarını göstermiştir. Katılımcıların mesleki gelişim algılarının, örneğin kişinin sahip olduğu yüksek lisans türü veya yüksek öğretim kurumu türü gibi faktörlere göre değiştiği saptanmıştır.

Anahtar kelimeler: Andragoji, Yetişkin Öğretim İlkeleri, Yetişkin Eğitimi, Mesleki gelişim

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LIST OF ABBREVIATIONS

PDAs: Professional Development Activities

HE: Higher Education

ALP: Adult Learning Principles

APDE: Adult Process and Design Elements

ALPDEQ: Adult Learning Principles and Process Design Elements

Questionnaire



CHAPTER 1: INTRODUCTION

Introduction

In this chapter, the context of this study, along with the background and andragogical framework related to the professional development of instructors in the higher education context are introduced. Also, studies conducted related to this framework, the problems in literature, and the purpose of this study along with the research questions are presented. Finally, the significance of the study by referencing earlier studies in literature is discussed.

Background

English is taught as a foreign language (EFL) in Türkiye and is the only compulsory subject taught from grade level 2 to 12 (Kirkgoz, 2007). Similarly, at the higher education level, many state and foundation universities offer English Medium Instruction (EMI) and Turkish-English Medium Instruction (T-EMI) programs. There are about 175 universities with dedicated preparatory English language programs to facilitate learners' transition to higher education, offering language skills development programs, generally from elementary to higher intermediate levels (British Council & TEPAV, 2015; Higher Education Council [HEC], 2016).

While English language instructors at primary and secondary education levels are certified, most EFL instructors in EMI contexts are not (Richards & Pun, 2022). Additionally, as for the former, the Ministry of Education (MoNE) designs and delivers in-service professional development (PD) focused events; however, as for the latter, such support is limited to institutional initiatives.

The number of EFL instructors is over 5900 in more than 150 different institutions in higher education (Yüksek Eğitim Bilgi Yönetim Sistemi, 2024). The requirements to be eligible for such positions in EMI contexts include having a Master's degree (for example, in the areas of Linguistics, English/American literature, or English Language Teaching), an acceptable level of language proficiency, a graduate-level test measuring verbal and quantitative skills (ALES), and a reasonable CGPA (T.C. Cumhurbaşkanlığı, 2018).

The study by the British Council & TEPAV (2015) examined “the state of English in higher education in Türkiye” and reported that “there is little training available in most universities ineffective approaches to EMI teaching” (p. 107), and “English teachers should have greater opportunities to access professional development...” (p. 111). Thus, there does not seem to be a systematic or required PD program to ensure the professional growth of EFL instructors in EMI contexts following their recruitment (British Council & TEPAV, 2015). The same report stated that more than three-quarters of instructors attended PD activities at the tertiary level in 2014; nonetheless, they found the PD activities ineffective as they did not address their needs. Similarly, the studies by Özcan (2011, as cited in Ayar, 2019) and Yurtsever (2013) reported that different bridging or preparatory programs conduct professional development activities based on the sources in hand, albeit ignoring the needs of the instructors. Ultimately, the studies related to PD of EFL instructors at the tertiary level within the framework of adult learning are found to be insufficient in Türkiye (Kılıç, 2020).

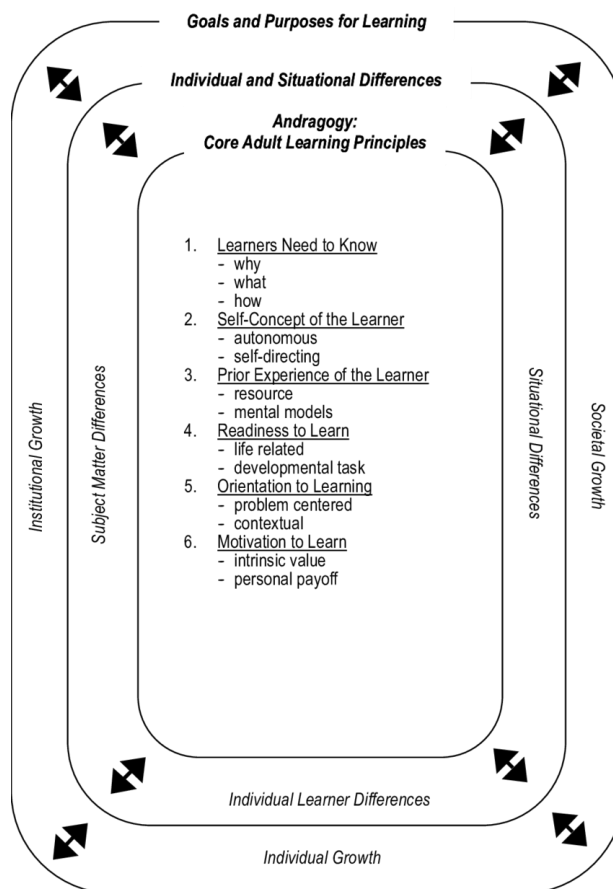
Educational policies around the world have ambitious targets for educators' professional development (PD) and student learning (Borko, 2004), and thus the PD of instructors is supported at the institutional and national levels around the world

depending on the context. However, many of these professional development efforts lead to little or no change in practices and fail to enhance student learning (Darling-Hammond et al., 2017; Day & Sachs, 2005). Given the body of literature reporting the inefficiency of PD and huge investments made by governments (Baustista & Ortega-Ruiz, 2015; Day & Sachs, 2005; Zepeda et al., 2019), research for better PD designs is needed both in K-12 and higher education settings in most countries.

The reported findings indicate that better-tailored PD practices need to be devised to meet the needs of instructors who are adult learners. As stated by Bush and Middlewood (2005), Darling-Hammond et al. (2017), Gregson and Sturko (2007), and Zepeda et al. (2019), the designs of professional development for instructors need to consider how adults learn if they aim to be effective.

To this end, understanding how EFL instructors in the EMI context perceive their learning experiences within the framework of adult learning theory (Knowles 1984; Knowles, 1989; Knowles et al., 2005) could be an area to explore for designing PD programs incorporating the *Principles of Adult Learning* and *Process Design Elements*.

This study intends to use the framework based on the adult learning theory (andragogy) by Knowles et al. (2005). Andragogy, defined as ‘the art and science of adult learning’ (Knowles et al., 2005, p.61), has six principles regarding the way adults learn: (1) they need to know why, what, and how they learn, (2) they are self-directed, (3) they have a rich repertoire of a prior learning experience, (4) they learn when there is a need, (5) they are problem-centered and seek for an imminent solution, and (6) they are self-motivated in their learning (Figure 1).

Figure 1*Andragogy in Practice*

Note. From *The Adult Learner: The Definitive Classic in Adult Education and Human Resource Development* (p. 149), by Knowles et al., 2005, Routledge.

In addition to the six core principles of andragogy, Knowles' (1984) conception includes *Process Design Elements*: (1) preparing the learner, (2) setting a climate that is conducive to learning, (3) devising system for collaborative planning, (4) identification of learning needs, (5) formulation of learning objectives, (6) learning plan design, (7) execution of the learning through appropriate materials and (8) evaluation of learning to reidentification of learning needs. In line with these elements, this research examines how EFL instructors in higher education perceive their learning experiences in professional development activities (PDAs) within the context of principles, and design and delivery, of andragogy. The study's findings

could be useful in identifying areas that need to be enhanced in the design and delivery of learning experiences in PDAs. The study findings could also shed light on the perceptions of EFL instructors based on demographic characteristics.

To this end, the *Adult Learning Principles and Design Elements Questionnaire* (ALPDEQ) has been utilized by the researcher. The questionnaire is based on the conceptions of Knowles et al. (2005) and developed by Wilson (2005).

The conceptual framework guiding this study is based on the work of Malcolm Knowles (1978, 1980, 1984), who is considered the father of andragogy. In Knowles's (1970) terms, adults learn or improve existing skills differently from children and this necessitates a new approach at all levels of the education system. In his terms, adults and children display differences with respect to autonomy, life experience, readiness, orientation to learning, and motivation (Knowles et al., 2020). The assumptions on how adults learn are as below:

1. Adults need to know why, what and how they need to learn something before commencing their learning. To put it differently, as Tough (1979) pointed out before being involved in learning experiences, adults need to see how the advantages will outweigh the time and effort spent. The first principle also refers to involving learners in the design, and implementation of their learning activities followed by the evaluation phase as stated by Brookfield (1986), and Knowles (1992).
2. Adults have a psychological need to be treated by others as capable of self-direction. As stated by Knowles (2005), when not given autonomy or control of their learning, adults may feel resentment towards learning. However, by being involved in decision-making, and implementing changes, adults can have a feeling of ownership.

3. Adults have accumulated experiences, and these can be a rich resource for learning. This assumption states that adults bring in their prior experiences to learning, and this may enhance or stunt new learning (Knowles, 1978). In parallel with this, when their earlier experiences do not match the new concepts, adults may display resistance to learning (Mezirow, 1997; Schön, 1987). As suggested by Brookfield (1986) to overcome biases, reflections and discussions might be useful in helping adults learn new concepts.
4. In adults, readiness to learn is a function of the need to perform social roles. Adults feel ready to learn when they confront problems (Knowles, 1980). For that reason, according to Knowles et al. (2005), adult educators should provide the support to surface the need to know by working on real-life problems.
5. Adults are problem-centred, that is, their problems and needs determine their goals (Knowles, 1980). In Knowles's terms, adults are more likely to be involved in learning if it helps them meet their everyday needs. In other words, they are interested in learning things that have immediate relevance.
6. For adults the more potent motivators are internal (Knowles, 1989). Although external factors like increased pay or opportunities for promotion could motivate some adults, most adults are usually intrinsically motivated (Knowles, 1984).

How adults learn or improve existing skills has been examined by several other theorists as well (Brookfield, 1986; Candy, 1991; Knowles et al., 2020; Kolb, 1984; Mezirow, 1997; Schön, 1987). For example, Kolb (1984) pinpoints that new

concepts could be internalized by active experimenting, observation, and reflection. To this end, he suggests that adult learners be active participants in their learning. Similarly, for Schön (1987) learning is embedded in real-life problematic situations so perceiving experiences through a critical lens is vital for professional growth. That is, experimentation and reflection in and on the experiences are critical for professional growth. Likewise, in order for an experience to be transformative, there needs to be a disorienting dilemma triggering reflection and this has to be followed by experimenting and reintegration according to Mezirow (1997). Mezirow (1997) also states that adults interpret new experiences through the lens of earlier experiences, and they usually refuse to accept new concepts unless they match prior experiences. Finally, adult learners mostly tend to be self-directed in their learning was further studied by Candy (1991), Tough (1971) Zepeda and Ponticell (2019). In their terms, adult learners are aware of their needs, and they are individuals who could design and improve their learning experiences.

Problem

While countries with well-developed governance structures could ensure opportunities for adult learners (Desjardin & Ioannidou, 2020), other studies report that the integration of adult learning into PD designs is deemed necessary but overlooked in most. To exemplify, the case study with technical school teachers by Gregson and Sturko (2007), the large-scale experimental study in diverse settings by Trivette et al. (2009), another case study with secondary teachers by Fitzgerald (2014), a longitudinal study in the USA with primary school teachers by Kelly (2017) indicated that application of adult learning principles in PD leads to positive learning outcomes but often neglected.

There are also some steps taken to facilitate adult learning in Türkiye, albeit they mostly focus on lifelong learning centers, evaluation of courses offered, or they are related to PD in other sectors rather than EFL instructors in the higher education context.

Even though adult education became an elective course at education faculties in higher education (Higher Education Council [HEC], 2018), there is no systematic approach to how adults learn at a national level (Teke, 2020). While the number of postgraduate programs related to adult learning has increased, and now Marmara University, Ankara University, Bartın University, Sakarya University, and Hacettepe University offer MA and Ph.D. programs on lifelong learning and adult education, only %9.44 of the theses were on adult learning between the years 2010 to 2020 (Kılınç & Uzun, 2020). Also, only a few of these studies were written in English (Kılınç, 2020). Some of the studies highlight the impact of *Adult Learning Principles* on PD in different contexts. However, PD of EFL instructors in higher education is an area that needs further study for the following reasons.

First of all, adult learning became an elective course in education faculties (Higher Education Council [HEC], 2018); nonetheless, it relies on the number of academicians in this area (Teke, 2020). Also, as stated by Balbay et al. (2018) pre-service training of potential teachers displays great differences across the country and the curriculum offered still lacks the focus on teaching adults.

Moreover, following the recruitment, instructors are not offered a systematic PD program in higher education in Türkiye (Balbay et al., 2018; British Council & TEPAV, 2015). The reasons for this could be listed as the diverse needs of the universities, the lack of sources like funding, and technology, and most importantly significance given to PD (Balbay et al., 2018). Thus, studies focusing on the EFL

instructors' PD in higher education in Türkiye often report the inefficiency of these designs or PD activities (Başar, 2023; Coşkuner, 2001; Ekşi, 2010; Şentuna, 2002 & Yurtsever, 2013). These studies also indicate that PD designs ignore the diversity of needs and experiences of instructors and lack continuity. Similarly, studies in the literature validate the inefficiency of some of the PD programs because they overlook how adults learn and ignore the earlier experiences and needs of the instructors (Ball & Cohen, 1999; Day & Sachs, 2005, Desimone et al., 2002; Zepeda et al., 2019). Maggioli (2004) concurs with this and states that even though andragogy has been studied for many years, how adults learn is usually neglected in PD designs.

Purpose

The purpose of this is threefold:

1. To investigate the extent to which EFL instructors in higher education perceive their professional development activities (PDAs) as adhering to *the Principles of Adult Learning*
2. To examine the extent to which EFL instructors in higher education context perceive their PDAs as aligning with *the Process Design Elements*
3. To explain whether EFL instructors' perceptions differ based on their gender, age, years of ELT experience, years of ELT experience in HE, educational background, and type of higher education institutions they work

The study's findings could have broad and specific benefits on professional development research, including directing the construction of successful professional

development plans or guidelines for foreign language programs at state and foundation universities.

Research Questions

1. To what extent do EFL instructors in higher education perceive their professional development activities (PDAs) as adhering to the *Principles of Adult Learning*?
2. To what extent do EFL instructors in higher education context perceive their PDAs as aligning with the *Process Design Elements*?
3. Do the EFL instructors' perceptions differ by gender, age, years of experience in ELT and experience in higher education, educational background, and type of higher education institution?

Significance

The study addresses the limited research on EFL instructor PD activities in Türkiye, specifically within the framework of adult learning theory. Previous research (British Council & TEPAV, 2015) has indicated PD activities offered to EFL instructors at the tertiary level are often perceived to be ineffective. While some research focuses on professional development (PD) for the betterment in this context using other lenses, the PD of English as a Foreign Language (EFL) instructors within andragogy in higher education remains underexplored. Investigating EFL instructor perceptions in relation to their learning experiences within the framework of adult learning could pave the way for more effective designs of PD programs, as instructors have first-hand learning experiences of these activities.

To examine these perceptions, the utilization of the *Adult Learning Principles and Design Elements Questionnaire* (ALPDEQ), developed by Wilson (2005), and newly implemented in the Turkish context, can provide a unique lens to this end.

The study's findings can inform policy with view to the design and implementation of PD programs for English language instructors in Turkish higher education institutions.

The findings of the study could benefit the studies related to professional development in general and specifically, the development of institutions that teach English as a foreign language in higher education.

Definition of Key Terms

EAP: It is the type of English that is studied in academic contexts such as in university courses. (Harmer, 2007).

EFL: It is an acronym that stands for “English as a Foreign Language” (Reid, 1995).

ELT: It is the field of teaching English to non-native speakers of languages (British Council &TEPAV, 2015).

EMI: It is the teaching through English as the medium of language (British Council &TEPAV, 2015).

ESP: It refers to the teaching and learning of the specific skills and language required by particular learners for a specific purpose (British Council &TEPAV, 2015).

CHAPTER 2: REVIEW OF RELATED LITERATURE

Introduction

In this chapter, the theoretical foundation of adult learning theories, related major theories, the basic *Principles*, and *Process Design Elements of Andragogy* by Knowles et al. (2020) are presented. Additionally, the conceptual framework of this study is introduced. Next, the relevant studies related to the professional development of instructors within the framework of andragogy around the world and in Türkiye are reported.

Theoretical Foundations

Introduction to Adult Learning

How adults learn or enhance skills and understanding has been examined by several theorists and researchers. In this vein, there is no one theory, paradigm, or collection of principles that can fully account for the complexity of adult learning (Knowles et al., 2020; Merriam et al., 2007).

Likewise, being an adult cannot be summed up in one definition as it could be described from a biological, legal, or social perspective. However, this study bases the definition of being an adult on a psychological perspective in that we enter adulthood when we accept responsibility for our own choices (Knowles et al., 2020).

Adult learning was initially contrasted with conventional learning systems by Lindeman (1926) and Knowles, who introduced the term ‘andragogic’ to the USA, contrasted andragogy with pedagogy by defining it as ‘the art and science of teaching adults’ (2005, p.61). According to Knowles, adults, and children are different with

respect to their need to know (1984), self-concept, life experiences, readiness, orientation to learning (1970), and motivation (1984). Knowles' later position was that pedagogy-andragogy is a spectrum extending from teacher-directed to self-directed learning and it is appropriate for children and adults (1980). Similarly, Merriam et al. (2007) stated that andragogy appears to be situational rather than adult-specific. Also, other factors such as individual differences, goals, and purposes could impact adult learning (Knowles et al., 2020). Therefore, how adults learn has been examined from various perspectives considering many variables and this section aims to provide an overview of these.

Major Theories

Self-Directed Learning

Self-directed learning (SDL) could be perceived as learner autonomy as stated by Candy (1991) and Knowles et al. (2020). For Merriam (2001), SDL is an adult education goal as well as a process that results in effective learning. SDL has its roots in Dewey's concepts and has been studied extensively since Houle's study aiming to identify what and why adults learn (Knowles et al., 2020). According to Houle's findings, learners are classified as goal-oriented, activity-oriented, and learning-oriented (1961). In his terms, goal-orientated learners commence learning to meet their objectives or needs and aim to satisfy their interests independent of specific organizations unlike learning-orientated ones who feel motivated by expanding their knowledge. Finally, activity-oriented ones engage in learning not only for the content or purpose of it but rather for the social interaction it offers. The findings of Houle's study also underscore that learners may exhibit characteristics of more than one type of learner (1961). Building on the work of Houle (1961), Tough (1971) focuses on how adults learn and the assistance they seek. The study reveals

that 73 per cent of adults are self-directed in their learning benefiting from friends, books, and technology. Tough's (1971) study also concludes that adults go through different phases in a learning project and improving their ability to cope with each phase is critical for them.

It has been acknowledged that adults' levels of self-direction may vary due to the process of learning (Mocker & Spear, 1982), the situation in which the learning takes place (Candy, 1991; Grow, 1991), and personal differences (Brockett & Hiemstra, 1991; Garrison, 1997). In Mocker and Spear's model (1982) change in the environment, earlier experience of the learner, and possibilities of practice are the factors that impact self-directedness in adults. Almost a decade later, studies of Candy focus on the context and how it affects self-directedness (1991). In Candy's terms, a person with a high degree of autonomy may also prefer a teacher-directed environment when he or she has insufficient prior experience related to that area. Further contributions to SDL are made by Brockett and Hiemstra (1991) related to individual differences and the process of learning, i.e., how the learning is planned, implemented, and evaluated. Finally, according to Garrison (1997), SDL is achieved through the interaction of three facets: self-management, self-monitoring, and motivation. All in all, when participating in learning activities, adults could have various approaches, strategies, and choices because of diverse factors. That's why adults have the *Need to know* and should be involved in setting the objectives, designing learning experiences, and evaluating them (Knowles et al., 2020).

Reflective Practice

Reflection could be defined as a deliberate pause to observe and examine one's own experience and state of mind, which aids practitioners in improving their abilities (York-Barr et al., 2006). Schön (1987) states that professionals are

constantly confronted with unique cases. According to him, practitioners cannot manage these cases by solely using theoretical knowledge or experience as they are distinct, uncertain, and context bound. Schön uses the term "professional artistry" (1987, p.22) to define the types of competence practitioners occasionally exhibit in these situations. To cope with these unexpected cases, practitioners need to reflect in and/or on their experiences within the knowledge and experience they hold, and this reflectivity aids them in sharpening their professional skills (Schön, 1987). While reflective practice could be impromptu and often happens in or after the experience, Brookfield (1984) suggests a systematic approach to critical reflectivity. According to Brookfield (1984), practitioners could engage in critical reflectivity to improve their teaching skills using four lenses: autobiographical, students, colleagues, and literature. Echoing the work of Schön (1987), Brookfield (1984) and York-Barr et al. (2006) posit that reflective practices help practitioners bridge theory with practice, consider diverse perspectives, adopt newer perspectives, and gain greater professionalism, and voice. As stated by York- Barr et al. (2006) exemplars of reflective or critical reflective practices like observation, and discussion groups, and teacher journals could be prevalent in some educational systems. These practices are effective in adult learning as they rely on teachers' prior experience, and their readiness and needs are considered (Maggioli, 2006; York-Barr et al., 2006)

Transformative Theory

Transformative learning theory shares characteristics with andragogy, self-directed and reflective practice in that they all regard adults as autonomous learners capable of steering their learning (Knowles et al., 2020; Merriam et al., 2007). According to Mezirow (1997), transformative learning occurs when our frame of reference changes as a result of an event or experience. In his terms, adults bring a

consistent frame of experience, or filters, with beliefs, concepts, and feelings all of which help them interpret their experiences. When new concepts do not match with this earlier frame of experience, adults tend to dismiss them (Mezirow, 1991). To assist adults in transforming their frame of reference, Mezirow (1997) suggests a sequence of steps including experience, critical reflection, reflective discourse, and action. The learners' experiences are where the process starts, but simply having the experience does not suffice (Mezirow, 1997). In his terms, the learner must critically examine their presumptions and how they have interpreted the experience. This is followed by discussions with others that could result in a deeper understanding. As reported by Merriam et al. (2007) discussion and debate can take place in formal settings, in gatherings, and in one-on-one dialogues to facilitate adult learning.

When involved in communicative learning or challenged to solve issues, adults could become critically reflective. Such notified and genuine reflection could lead to the internal conflict that Mezirow (1997) perceives as necessary. According to him, adults could become critically reflective of their assumptions after reading a book, discussing a point, in problem-solving or through self-reflection all of which could bring about personal transformation. In the same vein, Zepedda et al. (2019) argue that clinical supervision and peer coaching could enable practitioners to cause changes in their thinking. To this end, adult educators must create a supportive and respectful environment and adult learners need to be ready to embrace new concepts (Knowles et al., 2020; Mezirow, 1997).

Experiential Learning Theory

Kolb's (1984) experiential theory intends to "differentiate experiential learning theory from rationalist and other cognitive theories of learning that tend to give primary emphasis to acquisition, manipulation, and recall of the abstract

symbols, and from behavioral learning theories that deny any role for consciousness and subjective experience” (p.20). Experiential learning theory perceives learning as the interaction between knowledge and experience, where each influences the other, rather than the transmission of knowledge (Kolb, 1984). In essence, experiential learning, like self-directed, reflective, and transformative learning theories, is one of the core aspects of adult learning (Knowles et al., 2020).

Kolb (1984) suggests that to enhance learning in adult education, the focus should be on involving learners in the process of learning. According to Kolb (1984), effective learning could be observed when a learner goes through four stages in the following cycle:

(1) Concrete experience: Concrete experience serves as the foundation for future learning. In other words, it allows validation and testing of abstract concepts by focusing on the concrete experience of the learner. The learner needs to be able to fully engage in new experiences with no bias.

(2) Reflective observation: Learning is perceived as an ongoing process based on experience, rather than a product. In this vein, reflection on concrete experiences from a variety of perspectives contributes to learning immensely. This may entail observing others' responses and behaviors, analyzing situations, and recognizing patterns and relationships.

(3) Abstract conceptualization: The reflective process is taken a step further with abstract conceptualization, which focuses on channeling those observations into a new concept, and theories.

(4) Active experimentation: In this stage, new ideas and theories are applied to new situations and therefore this stage requires taking risks and trying new things.

Andragogy

The term "andragogy" is well-known in the field of adult education and has its origins in Europe (Knowles et al., 2020). Its first use dates to 1833 and it is credited to a German academic named Alexander Kapp. Andragogy- both a word and a philosophically rooted methodology- has been advocated by several researchers in Europe before popularizing in the United States. The term was inherited from Savicevic of Yugoslavia in the late 1960s, it became popular with Knowles building on the work of Linderman, Dewey and Rogers in the States (Knowles et al., 2020).

Up until the 1920s, pedagogy “the art and science of teaching children” was the prevalent model of learning in the States (Knowles, 1970, p.40). However, as stated by Knowles (1973), the aim of pedagogy, which is mainly focused on the transmission of knowledge content, is not aligned with the needs of adults.

The earliest studies on andragogy in the USA were initiated by Linderman who was influenced by Dewey (Knowles et al., 2020). Lindeman (1926) avoided distinguishing adult and youth education but contrasted it with conventional education. Nevertheless, the need for a different approach to teaching adults became more apparent with the rising older population, globalization, and technology (Merriam et al., 2007). Lindeman (1926) further contributed to adult learning with several fundamental assumptions concerning adult learners:

1. Adults are motivated to learn based on their needs.
2. Adults focus on life-related issues in their learning.
3. The most valuable learning resource for adults is experience.
4. Adults have a strong desire to steer their own lives; therefore, it is better to collaborate with them in a process of mutual inquiry rather

than impart knowledge to them and then assess how well they adhere to it.

5. Individual differences grow as adults age; therefore, adult education must account for these variances as best it can in terms of the learning rate, style, and environment.

Following Lindeman's studies, Thomas (1939) contrasted adults with children with respect to individuality and social purpose and highlighted the necessity for a different approach for adults.

Rogers (1969) made further contributions to adult learning as he centers the learner in the learning process parallel to his view on therapy. In his terms, it is possible to facilitate someone else's learning, yet teaching someone directly is not. In this vein, he emphasized the importance of self-initiated learning, observable change in behavior, learner involvement in learning, and evaluation.

In brief, several researchers contributed to the development of andragogy. However, it became popular with Knowles in the States as he synthesized these concepts, insights, and findings into a coherent theoretical framework (Knowles et al., 2015).

Knowles' Adult Learning Theory

Andragogical Principles

Defining andragogy as "the art and science of helping adults learn", Knowles has been acknowledged as the father of andragogy (Knowles, 1970, p. 43). Knowles' principles regarding how adults learn evolved over the years; the first four principles (shown as numbers 2, 3, 4, and 5 below) were presented initially (Knowles, 1975, 1978, 1980). Another principle, *Motivation to learn* (shown as number 1) was

included in 1984 (Knowles, 1984), and finally, the last principle, *Need to know* (shown as number 6), was added in the 1990s (Knowles et al., 2005).

1. Adults need to know why, what and how to learn something before commencing their learning.
2. Adults have a psychological need to be treated by others as capable of self-direction.
3. Adults bring a rich reservoir of knowledge and experience that could impact learning outcomes significantly.
4. Adults become prepared to learn the skills they will require in order to function successfully in their everyday activities.
5. Children have a (conditioned) subject-centered orientation to learning, whereas adults have a problem-centered orientation to learning.
6. For adults the more potent motivators are internal. (Knowles, 1989, pp. 83-84)

There is ample proof that Knowles et al. (2020) wanted these principles to be taken as flexible presumptions that could be changed depending on the goals and purposes of learning and individual and situational differences as illustrated in the outer rings in the framework (Knowles et al., 2005).

Need to Know

According to the first principle, adults feel the need to know why, what, and how they learn (Knowles et al., 2020). The importance of satisfying the learners' needs within these three levels -why, what, and how to learn- has its roots in the earlier studies of Linderman (1929), Rogers (1951), and Houle & Thon (1969) as stated by Knowles et al. (2020). Integrating all these studies in a single framework, Knowles et al. (2020) also highlight the significance of meeting the learners' needs

within these three levels. The first level of *Need to know* is related to why to learn. According to Knowles et al. (2020) fulfilling adults' need to know why to learn is essential for giving adults a sense of choice and control over their educational endeavors (2020). Specifically, studies by Houle (1961) and Tough (1979) contributed greatly to the adults' *Need to know* why and how to learn. Study findings categorized the reasons for learning as goal orientation, activity orientation, learning orientation, yet pictured them as three circles with overlapping edges. The findings of a large-scale study by Clark, Dobbins, and Ladd (1993) concur with this need. Their study showed that participants perceived the training as more useful when they mutually planned the training and internalized its purpose. Another study by Reber and Wallin (1984) revealed that participants who had a clear understanding of purpose were more likely to reach their goals compared to the ones who did not. The second level of *Need to know* is what to learn and it is summarized as "who needs what, as defined by whom?" by Knowles et al., 2020 (p. 158). This need was also examined by Hicks and Klimoski (1987) and the study revealed that participants demonstrated higher commitment and had higher satisfaction regarding learning because of the allowance given to what to learn. Similar results were found in the study by Baldwin et al. (1991). In this study, participants given a choice regarding what to learn displayed higher motivation while the ones offered a choice but not did not receive it demonstrated the lowest motivation. Lindeman centers the learners' needs and highlights the social relevance of learning (1929), and Knowles et al. (2020) also state that adults devote their energy when they recognize a necessity to learn and accomplish a goal. Third, adults' *Need to know* how to learn. As stated by Knowles (1992) being involved in setting objectives and how to achieve them is essential as adults need to see how the advantages will outweigh the time and effort

spent. Likewise, according to Rogers “a person learns significantly only those things which he perceives as being involved in the maintenance of, or enhancement of, the structure of self” (1951, p. 389). Parallel to the literature, the research by Tannenbaum, Mathieu, Salas, and Cannon-Bowers (1991) examined how the training was designed and whether trainees’ expectations were met or not and eventually underscored the positive outcome of mutual planning and its empowering effect on self-directedness and motivation. Finally, according to Knowles et al. (2020), the facilitator needs to help adults become aware of the *need to know* using real or case studies. This enables adults to recognize the discrepancies between their current situation and where they want to be. Knowles et al. (2020) exemplify this by suggesting appraisal meetings, work rotation, or being exposed to role models.

Self-concept

Adults form a self-concept and feel accountable for their own choices and lives as stated by Knowles et al. (2020). According to Knowles et al., adults “develop a deep psychological need to be seen by others and treated by others as being capable of self-direction”, and unless they are “treated as being capable of self-direction, they resent or refuse situations in which they feel others are imposing their wills on them” (2005, p.65). Therefore, the term *self-concept* within the dimensions of *autonomy* and *self-direction* has been widely discussed in the literature (Brookfield, 1986; Knowles et al., 2020; Merriam et al., 2005).

Due to the confusion around these terms, it is necessary here to clarify exactly what is meant by autonomy and self-directedness. Autonomy in Knowles’ terms is defined as the steering of the learning experiences independently, which fosters ownership and causes a transformative change in the mindset (2020). Similarly, Brookfield (1986) defines autonomy as “the possession of an understanding and

awareness of a range of alternative possibilities” (p.58). Self-direction, on the other hand, refers to self-regulated behaviors to accomplish goals (Knowles et al., 2020). That is, adults demonstrate the characteristics of self-directed learning when taking actions to learn a new skill or a piece of knowledge while they become aware of their autonomy during learning and develop ownership (Brookfield, 1986).

However, it is not feasible to assume that adults prefer to be always self-directed and autonomous (Brookfield, 1986; Knowles et al., 2020; Merriam et al., 2007). Similar to all *Adult Learning Principles*, the self-concept of the learner may vary based on individual, and situational differences and the purpose of the learning (Knowles et al., 2020).

Specifically, the self-concept of the learner may differ depending on individual differences like “learning style, previous experience with the subject matter, social orientation, efficiency, previous learning socialization, and locus of control” (Knowles et al., 2020, p.172). While differences in learning styles were examined by Houle, 1961 and Tough, 1971, studies by Grow (1991) provided new insights into self-directedness by exploring the stages of autonomy in diverse situations. In addition to these studies, Garrison (1997) contributed to the exploration of self-direction and individual differences by examining self-management, motivation, and self-monitoring. The findings of these studies concur with the fact that multiple variables play a role in the self-concept of the learner (Merriam et al., 2005).

How adults learn based on their learning style was studied extensively by Houle (1961), and Tough (1971). This was followed by studies around the concept of locus of control (Rotter, 1990) and adults’ beliefs regarding how much control they have over their lives were examined (Archer, 1979; Phares, 1976). Additionally, how

earlier experiences of the learner determine the level of autonomy in diverse situations was further examined by Grow (1991). In addition to these studies, Garrison (1997) contributes to the exploration of self-direction and individual differences by examining self-management, motivation, and self-monitoring. The findings of these studies concur with the fact that multiple variables play a role in the self-concept of the learner (Knowles et al., 2020; Merriam et al., 2007).

Also, the self-concept of the learner is situational and influenced by the purpose of the learning (Knowles et al., 2020; Merriam et al., 1991). To exemplify, adults with other responsibilities may prefer to depend on a facilitator to save time (Knowles et al., 2020). Alternatively, the reason for learning could be individual growth in some cases, while it could be driven by institutional requirements in others (Knowles et al., 2020). In other words, broad generalizations may not be appropriate due to several variables. In this vein, other studies (Brockett & Hiemstra, 1991; Candy, 1991; Mocker & Spear, 1982; Pratt, 1988) on self-direction based on situational differences and the process of learning concur that adults must actively manage their learning as posed by the dynamic interplay of various factors.

Prior Experience

The third principle concerns how the prior experience of adults either enhances or stunts their engagement in new learning (Knowles et al., 2020). As stated by Knowles et al. (2020) earlier experiences of adults greatly influence how they learn by

1. allowing room for differences among individuals,
2. serving as a rich repertoire for learning,
3. causing biases inhibiting or facilitating learning,
4. helps adults shape self-identity.

Emerging from different fields of research, these four lines of inquiry form and strengthen this principle (Knowles et al., 2020). While andragogical studies already acknowledge how prior experience facilitated learning, studies from a cognitive psychological perspective contribute to it regarding how they cause bias and inhibit learning as stated by Knowles et al. (2020).

Adults' schemas, which may hinder or facilitate learning, were initially examined by Lewin (1951). According to him, earlier schemas need to be revisited to accommodate new concepts and he describes this change as unfreezing, change, and refreezing within his schema theory (1951). According to Lewin, when an earlier schema does not suffice in performing the task, it is unrealistic to ignore the 'inner resistance' that impedes learning (1951, p. 225).

That adults' earlier experience, or mental schema, could facilitate learning, or cause resistance was also discussed by Argyris (1982), and Schön (1987). In Argyris' terms, when the new concepts match earlier experiences, it allows learners to give responses automatically, which he refers to as a single loop, as suggested by Argyris (1987). This enables learners to embrace new knowledge and save time. On the other hand, when new concepts conflict with adults' schema, they challenge adults to reshape their perspective, and this is referred to as a double loop by Argyris (1982).

Schön (1987) made further contributions regarding how adults' existing mental models function during performing tasks. Schön (1987) refers to adults' automatic responses during performing tasks as knowing-in-action. While Schön defines reflection-in-action as the change in adults' perspective during the task, he refers to reflection on action as adults reevaluate their earlier schema and experience (1978). These studies have laid the foundations for the design of learning experiences as adults bring in their prior experiences or mental models that may

enhance or stunt new learning (Knowles et al., 2020). In other words, earlier experience could empower adults to perform effectively on daily tasks whereas they may also hinder progress as adults oppose modifications that contradict their established thought patterns.

In addition to schema theory (Ayrgrys, 1982; Lewin, 1951; Schön, 1987) studies on information processing, and memory research (Ormwood, 1990) examined what information is stored and under what circumstances they are ignored. As for information processing, adults' earlier experiences may result in filtering familiar perspectives while ignoring conflicting ones (Ayrgrys, 1982; Schön, 1987). These studies provided grounding for the constructivist view on adult learning and advocated that learning cannot be detached from its context. The research highlighted that relating the learning experience to the context helps learners develop a sense of ownership whilst allowing room for self-identity and reflection (Savery & Duffy, 1996; Tessmer & Richey, 1997).

Despite not being rooted in andragogy, these streamlines support the third principle of andragogy, which suggests adults' earlier experiences influence their learning greatly (Knowles et al., 2020). Having merged different perspectives concerning prior experience and learning, Knowles (1970) asserts that 'adults define themselves largely by their experience' and therefore they feel resentment and may resist new concepts when their prior experience is overlooked (p.50). As a result, Knowles et al. (2020) remind us that experiential techniques that draw on the learners' own experiences like group discussions, simulation exercises, problem-solving activities, and case studies could help adults reflect, develop a sense of ownership, and gain new perspectives.

Readiness to Learn

Fourth, “adults become ready to learn when their life situation creates a need to know” and learning experience can be effective when there is mutual anticipation of the situation and relevant assistance (Knowles et al., 2020, p.177). However, it could be challenging to identify the *Readiness* because of the dynamic interplay of variability as stated by Knowles et al. (2020).

One model to frame *Readiness* was proposed by Pratt (1988) highlighting the importance of direction and support. Pratt suggests that the needs and the self-direction of the learner vary depending on the situation (1988). That is, a learner could be highly self-directed in familiar contexts but may need help in direction, or support when faced with challenges.

In each situation, Pratt’s model (1988) outlines the need of the learner in either direction or support. In his model, the need for direction refers to the process and organization of learning such as the design of the learning experience. Support, on the other hand, refers to providing affective guidance regarding commitment and confidence (1988). Pratt highlights the importance of identifying the level of learner’s dependency and monitoring shifts in need for direction and support during learning (1988).

Parallel to Pratt (1988), Knowles (1970) advocates the importance of aid - either in direction or support- to surface the need to know by working on real-life problems via providing models, case studies, and learning contracts.

Orientation to Learning

The fifth principle presumes that adults tend to be problem-oriented as opposed to being subject-oriented (Knowles et al., 2020). That is, adults prefer to engage in learning if it helps them meet their everyday needs and are interested in

learning things that have immediate relevance (Knowles et al., 2020). This principle has also been found to be closely associated with the prior experience of the learner since the need to learn emerges when the earlier frame of mind or experience does not suffice (Knowles et al., 2020). Therefore, the experiential approach to learning has been deeply embedded in andragogy as stated by Knowles et al. (2020).

From an experiential viewpoint, learning could be defined as “the process whereby knowledge is created through the transformation of experience” (Kolb, 1984, p.38). In this vein, Kolb (1984) states that the facilitators’ job is to aid in problem-solving by transforming outdated beliefs, and experiences that hinder learning rather than a subject-oriented approach. Building on the work of Lewin’s problem-solving, Dewey’s, and Piaget’s model, Kolb included four stages in experiential learning (1984). In Kolb’s model, the learner starts from a concrete experience followed by observation, and reflection from multiple perspectives and goes through the conceptualization of abstract ideas before testing them in new contexts (1984). Kolb’s model also includes learning strategies for each stage (1984). In the first stage, learners need to be able to engage in new experiences without bias in the concrete experience. This could be reinforced through simulations, case studies, field trips, or real experience. Second, they need to be able to observe and reflect on their experiences from different viewpoints, which is called observation and reflection. To this end, discussions and observation practices could be employed. Third, they need to be able to construct concepts integrating their observations into coherent theories. Finally, learners need to be able to use these theories to deal with problems and this could be achieved via on-the-job experience.

In summary, adult learners’ problem orientation to learning could benefit both individuals and organizations in terms of increasing competency. To this end,

various experiential learning techniques could be implemented based on the context and purpose. These could include structured on-the-job training (Jacobs & Jones, 1995), action-reflection (ARL Inquiry, 1996), and transfer-of-learning (Bates et al., 1997 & Holton et al., 1997).

Motivation to Learn

The final principle is related to the motivation of adults. According to Knowles et al. (2020), the strongest motivators for adults are more intrinsic like an aspiration for employment fulfilment, or well-being while extrinsic motivators such as higher salary or promotion seem to motivate adults less. Also, closely linked to orientation to learning, adults are motivated to learn things that have personal relevance (Knowles et al., 2020). In Knowles' terms, the motivation of adults increases when the learning leads to a solution to a "problem in life or its payoff" (Knowles et al., 1998, p. 149).

More studies on what motivates adults were conducted by Wlodkowski (1985). In his terms "adult motivation operates on integrated levels, with multiple feelings and thoughts occurring simultaneously" [and, this includes] "success, volition, value, and enjoyment" (Wlodkowski, 1985, p.100). According to Wlodkowski (1985), these four factors could be explained as feeling successful as a learner, a sense of autonomy in the learning, feeling the learning is something one appreciates, and feeling that the learning is fun. Also, Wlodkowski (1985) outlines the qualities of a motivating adult educator as one with expertise, empathy, enthusiasm, and clarity.

Wlodkowski's claim regarding volition also aligns with andragogy's need to know why to learn (Knowles et al., 2020). Equally, knowing the reason for learning gives adults a sense of ownership as stated by Knowles et al. (2020). Given that

adults are motivated by internal factors, it is possible to suggest that adults' motivation stems from their personal values and beliefs.

Similarly, Wlodkowski's concept of volition also concurs with the expectancy theory by Vroom (1995). According to the expectancy theory (Vroom, 1995), adults are motivated when they believe they can be successful (expectancy), that learning will benefit them (instrumentality), and that the outcome will be valued by the learner (valence).

Adult Process Design Elements

Regarding the design of the learning, the adult learning theory employs a process model in which learners are actively involved in the design of the learning (Knowles et al., 2020). To Knowles et al. (2005), "the basic concern of people with a pedagogical orientation is *content*... In contrast, the basic concern of people with an andragogical orientation is *process*... [which] consists of eight elements..." (p. 295).

1st Element: Preparing the Learner for the Learning by Providing Information about the Learning Objectives and Approaches

Although being self-directed is one of the assumptions of adult learning, some participants may have limited experience with being self-directed. (Knowles et al., 2020). Thus, based on andragogical approach, the following components are considered to prepare the learner.

1. provide information,
2. prepare for participation,
3. help develop realistic expectations, and
4. begin thinking about the content" (Knowles et al., 2020, p.52).

Information delivery within andragogy could include the difference between proactive and reactive learning which also satisfies the adult learners' *Need to know*

how to learn (Knowles et al., 2020). Preparation regarding participation could refer to training on how to collaborate and exploit the resources like prior knowledge of the participants (Knowles et al., 2020). Additionally, preparing the learner will allow participants to relate the learning to real-life and work-related issues, develop realistic expectations, and work together in the design (Knowles et al., 2020).

2nd Element: Setting a Positive Climate for Learning

Setting a positive climate conducive to learning physically and psychologically has been advocated by multiple approaches (Knowles et al., 2020). As for the physical conditions, Knowles et al. (2020) state that accessibility to resources like people and materials is vital, but more importantly, there needs to be encouragement for their proactive use. In addition to the physical conditions, “human and interpersonal climate” is vital for collaboration and participation in adult learning (Knowles et al., 2020, p. 55). From a cognitive perspective, well-defined objectives, expectations, and opportunities, and a transparent system allowing questioning and objective feedback are found to be crucial in learning. From the perspective of personality theorists, setting an accepting climate that acknowledges individual and motivational differences while maintaining anxiety levels at a healthy level, is essential. Specifically, motivations such as achievement, affiliation, or power are fostered by those who are responsive to them (McClelland, 1987). For example, individuals with strong affiliation motives feel a higher sense of belonging within a group and this can be considered when climate is set (Knowles et al., 2020; McClelland, 1987). Equally, humanistic psychologists emphasize the importance of a secure, supportive, tolerant, trusting, and considerate climate where learners can collaborate rather than compete.

3rd Element: Devising a System for Mutual Planning

Andragogy differs from conventional methods in that facilitators can help ease learning as opposed to instructing (Knowles et al., 2020). As put forward by Rogers (1951) in his five hypotheses pertinent to the learner-centered approach, we can only facilitate learning, but we are unable to instruct another person. This is also put forward by Knowles et al., any program planned by authorities would conflict with a core principle of andragogy: self-directedness (2020). Additionally, people's commitment to a decision increases in direct proportion to how much they participate in its creation (Knowles, 1984; Rogers, 1951). Therefore, collaborative planning with participants will lead to positive beliefs toward learning and increase the sense of ownership (Knowles et al., 2020). To this end, learners are to be provided with a transparent system, with a sincere delegation of responsibilities and meaningful involvement in decision-making processes (Knowles et al., 2020).

4th Element: Identifying the Needs for Learning by Collaborative Negotiation

Within andragogy, the identification of needs in learning is the assessment of gaps between the objective and current state as specified by the learner (Knowles et al., 2020). While the focus is on self-assessment, the human resource developer equips learners with tools and procedures to make informed decisions (Knowles et al., 2020). To this end, a variety of strategies, as discussed by Knowles (1984), ranging from as simple as a checklist to elaborate evaluation systems, including an accurate learning gap analysis could be incorporated. Similarly, the examples to conduct the gap analysis could include personnel appraisal systems, job rotation, exposure to role models, and diagnostic performance assessments (Knowles et al., 2020).

5th Element: Planning Program Objectives that Will Address These Needs

After devising a collaborative planning system and identifying the needs, program objectives need to be established jointly (Knowles et al., 2020). In accordance with andragogy, learners are unlikely to embrace the learning objectives unless they are aligned with their self-defined needs. Thus, the collaborative objective setting will lead to higher ownership of them (Knowles et al., 2020). Translating the identified needs into objectives could be achieved through learning contracts in small groups as suggested by Knowles et al. (2020). These contracts could be reviewed and co-edited during the learning process.

6th Element: Designing a Pattern of Learning Experiences Designed in Line with Readiness

Adults are problem-oriented (Knowles et al., 2020), and their readiness could be related to some factors such as work or life-related issues, existing experience, relevance, or importance and climate (Goodwin, 1960, as cited in Knowles et al., 2005). In line with this, Knowles (1968), Tough (1971), and Houle (1972) highlight the significance of personalized objectives and formats and customized methods, tools, and sequencing based on readiness. To this end, Tough suggests a wide range of self-directed individual or team learning projects from which they can benefit based on readiness and need (1979).

7th Element: Conducting These Learning Experiences with Appropriate Techniques and Materials

The role of the adult educator encapsulates facilitating the learning process by considering the *Need to Know, Self-Concept, Prior Experience, Readiness, Orientation to Learning, and Motivation* as suggested in the *Principles of Andragogy* (Knowles et al., 2020). Parallel to this, inquiry-based, or experiential techniques- as

opposed to the transmission- could be preferred as long as they align with the learners' preferences (Knowles et al., 2020; Merriam et al., 2007). These techniques, where learners proactively steer their learning, satisfy the learners' need to know how the learning will occur while also recognizing their *Readiness*, *Self-concept*, and *Prior experience*.

8th Element: Evaluating the Learning Outcomes and Reidentifying Learning Needs

The evaluation model by Kirkpatrick (1971) has been found aligned with Knowles' andragogical framework, and this makes it the most feasible model compared to other evaluation models so far. According to Kirkpatrick (1971), the evaluation of learning has four levels. The first level of evaluation is related to how participants perceive the program offered. This could be achieved through surveys and focus groups regularly so that necessary amendments could be made to the program. The second level of the evaluation concerns what has been gained from the program. To this end, pre-and post-tests could measure the attainment. The third level aims to provide information on the actual shifts in the learners' behavior before and following the training. The feedback is gathered through observation, self-rating reports, interviews, or surveys. The fourth level involves the evaluation of results like the effects of training on student learning or satisfaction. Knowles et al. (2020) contribute to Kirkpatrick's evaluation of learning with the fifth level which is the reidentification of needs. According to Knowles et al. (2020), given that adults' learning needs vary in different situations and over time, creating conditions to allow learners to reassess their goals and their discrepancies is critical.

Instrumentation in Andragogy

Despite widespread recognition and consensus on the effectiveness of andragogy, there is still work to be done in generating a psychometrically sound instrument that directly measures the *Principles of Andragogy and Process Design Elements* (Holton et al., 2009; Knowles et al., 2020; Merriam et al., 1997; Rachal, 2002; Wilson, 2005).

When earlier instruments in andragogy (Christian, 1981; Conti, 1978; Hadley, 1975; Kervin, 1979; McCollin, 1998; Suanmali, 1981) are examined, descriptive studies on the orientations of learners or educators and philosophy of learning are found to be prevalent (Knowles et al., 2020; Wilson, 2005).

Specifically, the first instrument in andragogy was the *Educational Orientation Questionnaire* (EOQ) by Hadley (1975) aimed at assessing the pedagogical and andragogical orientations of trainers as well as differences in their beliefs and efficient learning approaches. The constructs of the questionnaire produced reliable results in the pedagogy–andragogy continuum. Another instrument on the orientation of the educators was the *Principles of Adult Learning Scale* (PALS) by Conti (1978). While not intended as a direct measure of andragogy, the validated tool could evaluate teaching methodologies that closely align with the principles of this theory (Knowles et al., 2005). In 1987, Knowles developed the *Personal HRD Style Inventory* to enable educators to self-evaluate their orientation to andragogy; nonetheless, it needs to be validated.

The orientation of adult learners was also examined in the literature. Building on the work of Hadley (1975) and Kerwin (1979), Christian (1981) developed another instrument named as *Student Orientation Questionnaire* (SOQ) to determine the inclinations, attitudes and beliefs of the military personnel and civilian personnel

as adult learners (Knowles et al., 2015). As stated by Christian (1982), this study was significant as it allowed facilitators or educators to adapt their educational approach depending on the orientation of the learner; nevertheless, it couldn't measure the six *Principles of Adult Learning and Process Design Elements*, either (Holton et al., 2009; Knowles et al., 2020). Similarly, the *Principles of Adult Learning Scale* (PALS) by Conti (1978) was modified as the *Adapted Principles of Adult Learning Styles* (APALS) by McCollin (1998) to examine how learners perceive the teaching styles of their educators (Knowles et al., 2020).

All in all, the preceding instruments used in adult learning research were mostly descriptive (Holton et al., 2009; Knowles et al., 2020; Merriam et al., 1997; Rachal, 2002; Wilson, 2005). However, to equip adult educators with stronger evidence-based theory and principles, there is a need for a valid and reliable instrument that evaluates the *Principles of Andragogy and Process Design Elements* (Holton et al., 2009; Knowles et al., 2020; Merriam et al., 1997; Rachal, 2002; Wilson, 2005).

Wilson's Framework

The instrument *Adult Learning Principles and Process Design Elements* (ALPDEQ) by Wilson (2005) was utilized in this study as the study marked a significant advancement in andragogy by separating and assessing *Adult Learning Principles* and *Process Design Elements* by Knowles et al. (2020) in a single instrument (Holton et al., 2009; Wilson, 2005). Due to the limited predictive studies in the field as suggested by Merriam and Brockett (1997) and Rachal (2002), Wilson's study aimed to investigate the impact of andragogy on learning and satisfaction while developing a valid and reliable instrument to further our understanding of andragogy (2005).

In this endeavor, the study managed to measure five of the *Adult Learning Principles* – *Need to know, Self-directedness, Prior experience, Readiness, and Motivation* via ALPDEQ (Wilson, 2005). Since the *Orientation to learning* factored together with *Motivation*, it was labelled as *Motivation* by the researcher. As for the *Process Design Elements*, the ALPDEQ was able to measure – *Preparing the learner, Climate setting, Setting objectives, Designing learning experiences, Learning activities, and Evaluation of learning*. The construct *Mutual planning* was discarded in this study as learning setting did not allow learners' involvement in planning (Wilson, 2005). All in all, the ALPDEQ appears to have isolated and measured andragogy more successfully than any previous study (Wilson, 2005).

Utilizing ALPDEQ, the theory of andragogy- *Principles of Adult Learning and Process Design Elements*- was tested in a post-secondary learning environment with MBA learners (Wilson, 2005). In this comprehensive research, five distinct independent variables were examined: faculty characteristics, student characteristics, *Principles of Andragogy, Process and Design Elements* of adult learning and course content. Wilson's study aimed to investigate whether these served as predictors of learning and learners' satisfaction with the faculty member and the course (2005).

As for the learning, learners showed cognitive achievement regardless of the level of *Andragogical Principles or Process Design Elements* considered. That is, the andragogical constructs did not show a predictive power for learning outcomes, but faculty characteristics and course content type did. In the study, faculty characteristics included ethnic background, age, work related to course delivered, field experience, course applicability to work and content type. The study showed that ethnicity and field experience were negative predictors of learning whereas age,

work related to the course, course applicability, and soft course content were positive predictors in this setting.

As for satisfaction, learners' satisfaction with the faculty and the course was examined. All the five independent variables – instructor and student characteristics, *Adult Learning Principles* and *Process Design Elements*, and course contents- seem to be related to the satisfaction of the learners.

As for learner satisfaction with the instructor, the instructor's average course load per year was found to be a highly significant predictor of student satisfaction. According to Wilson (2005), increased knowledge of the university helps instructors perform better, which in turn improves student satisfaction. *Process Design Elements* *Preparing the learner* and *Climate setting* were also found to be positively related to satisfaction with the instructor. According to the findings, faculty members who foster a conducive environment for adult learners increase student satisfaction. Likewise, the study confirmed the importance of *Preparing the learner* since adults need to know why, what and how they learn. Only one student characteristic variable, the time gap between undergraduate and graduate school, was found to be negatively related to instructor satisfaction. Despite Wilson's positive expectations, earlier experience of the learners during the gap time and work and life-related issues may have caused learner reluctance and resistance to accept new concepts in this study.

Regarding learner satisfaction with the course, *Motivation*, *Setting objectives* and *Evaluation of learning* were strong predictors of learner satisfaction with the course. That is, motivation to learn, mutually set objectives and evaluation choices are related to higher satisfaction with the course. However, student material related to work and life had a negative correlation with course satisfaction. This was

surprising given the theory of andragogy, which states that adults seek assistance to cope with difficulties related to work and life.

In summary, the findings suggest a positive correlation between *Preparing the learner*, *Climate setting*, and student satisfaction with the faculty. Also, the results show a positive correlation between *Motivation*, *Setting objectives* and the *Evaluation of learning* with student satisfaction with the course. While Wilson's research findings are valuable, her most significant contribution is to the methodology and practice of conducting empirical research on andragogy.

Studies Focusing on ALPDEQ

Studies on Learners as Adults

Utilizing Wilson's ALPDEQ (2005), several researchers investigated the link between *Adult Learning Principles* and *Process Design Elements* and learner satisfaction (Conaway, 2009), as well as learning outcomes (Coker, 2013). Additionally, the perceptions of the learners related to andragogy were examined across various post-secondary settings (Aljohani, 2015; Aljohani & Alajlan, 2021; Budin et al., 2015; Newton, 2019; Shinoda et al., 2014).

The study by Conaway (2009) investigated which age group (18-25; 26-39; and 40-59) was more congruent with *Adult Learning Principles* in community college and examined the learner satisfaction with the course in these three age groups. Also, the study sought to examine if these variables predicted learner satisfaction with the course. A cross-sectional, quantitative, descriptive research approach was employed in this study and the first part of the ALPDEQ by Wilson (2005) was used to this end. The study concluded that the acceptance of *Adult Learning Principles* and learner satisfaction did not differ across age groups while

learner satisfaction was predicted by the combination of age and acceptance of andragogical principles.

There are also studies attempting to examine the effectiveness of andragogy on learning. The study by Coker (2013) sought to investigate if using Knowles' andragogical method in teaching was linked to the performance of adult ESL students using a correlational study. Using ALPDEQ by Wilson (2005), the study revealed a positive relationship between students' self-reported use of Knowles' andragogical instruction method and their ESL competency. Equally, a positive correlation between contact hours and English Language course scores were reported.

Another study by Budin, Zaharuddin and Ismail (2015) utilized the first part of the ALPDEQ to investigate undergraduate learners' level of *Readiness* to web-based technology within the andragogy. 270 young adults from the Department of Mechanical Engineering and Business Administration participated in the study. Nearly 70% of the learners were found to fit andragogical assumptions of *Self-directedness*, *Readiness*, and *Motivation* while half of the learners were not andragogically oriented in terms of *Need to know* and *Prior experience*. The study concluded that most undergraduate students are, to some extent, adult learners still getting used to web-based learning technologies and suggested educators are more attentive to learners' readiness level towards web-based technology learning.

Learners' perceptions related to the training they received were also examined parallel to Wilson's intent (2005). The study by Aljohani (2015) examined the perceptions of the learners regarding the instruction they received at the graduate level at King Saud University. In this correlational study, the instrumentation ALPDEQ by Wilson (2005) was used. The researcher concluded that there was a

positive relationship among learners' perceptions of their learning experiences with *the Principles of Adult Learning*, *Process Design Elements* and Islamic teaching. The only construct *Learning activities* showed no relationship with the other *Process Design Elements*.

Likewise, in the cross-sectional correlative study by Newton (2019), the relationship between andragogic facilitation and stewardship was examined in a particular leadership program offered at a university. The study investigated how instructors and Faithful Stewards program design impact various student groups. To that end, a part of Wilson's (2005) *Adult Learning Principles Design Elements Questionnaire* (ALPDEQ), Hernandez's (2007) Stewardship Scale, and Newton's (2019) *Plexiformation of Leaders Survey* were used for data collection in this study. The study concluded that program design and instructors impact students positively beyond their education. The study's findings also revealed a strong correlation between the degree of student-perceived andragogic instruction delivery and their perception of stewardship. That is, students who perceived a higher level of andragogic instruction delivery also perceived a higher level of stewardship.

Another study by Aljohani and Alajlan (2021) attempted to investigate how advanced diploma students perceived the use and importance of andragogy in the program offered to them. 526 learners were surveyed regarding the *Principles of Adult Learning* through the first section of the questionnaire ALPDEQ by Wilson (2005). According to the study's findings, *Readiness* and *Self-directedness* were identified as the key principles for effective participation, but students also reported practicing these the least. The consideration given to *the Need to know* received the highest average score. Most survey respondents stated that they understood why they

were taking part in the learning experience while female participants perceived the *Need to know* as more important.

Studies on Professional Development of Instructors

While it is possible to find more research on the satisfaction, perception or performance of adult learners using ALPDEQ (Wilson, 2005), which aligns with Wilson's intent in her study, there are comparatively fewer studies that specifically explore adults as professionals using the same framework.

The study by Houston (2016) examined instructors' self-reported levels of engagement in in-service professional development activities and factors that instructors believed to be important in their engagement. The study also sought to find specific *Principles of Andragogy* that had the biggest effect on their engagement. 276 senior instructors from five different K-12 schools participated in this convergent parallel mix design study. Houston (2016) synthesized multiple inventories -the *Modified Instructional Perspectives Inventory* (Henschke, 2013), *Instructional Perspectives Inventory-Revised for Teachers* (Stricker, 2006), Staff Development Survey (James, 2007) and the *Adult Learning Principles Design Process Elements Questionnaire* – ALPDEQ (Wilson, 2005). The findings of this study, specifically the principles of *Orientation to learning* and *Readiness to learn*, demonstrated the value of using andragogy as a framework for designing effective professional development. Additionally, the significance of addressing the diverse needs of the instructors, prior experience, internal motivation and was also highlighted in the study. Parallel to these findings, the study emphasized the importance of involving instructors in PD designs, devising designs conducive to reflection, and setting a collaborative environment in PD.

Weber-Mayrer (2016) carried out an experimental study in the context of early childhood education and examined the engagement of educators in professional development within the framework of andragogy, as well as their phonological awareness and knowledge, literacy beliefs, and self-efficacy. The ALPDEQ (Wilson, 2005) and API by Holton et al. (2009) were synthesized specifically to investigate engagement in PD in this small-scale study. Following the intervention, the integration of andragogy resulted in increased engagement in PD, awareness, abilities and knowledge in phonology with a significant effect size; however, there was no difference found in instructors' literacy beliefs and self-efficacy.

Another study was conducted by Jasso (2018) to examine instructors' perceptions of coaching and mentoring within the framework of andragogy. 116 educators, teaching from kindergarten to Grade 6, from 6 different states with diverse backgrounds participated in this quasi-experimental research. Upon implementing the adapted version of the first part of ALPDEQ by Wilson (2005), the researcher conducted interviews with five participants and examined journals. In the study, instructors who received instructional coaching reported an improved ability to implement changes in the classroom. The study also found a relationship between coaching and satisfaction within the andragogy. Specifically, the study concluded that the application of *Adult Learning Principles – Need to know, Prior experience and Motivation-* improves instructors' perceptions, and they feel more motivated to make changes in the classroom. However, the study showed that consideration given to *Self-concept* and *Orientation to learning* were not perceived as effective by the participants.

Finally, a study by Edward (2022) examined how novice instructors in A-1 school perceived their learning experiences with respect to andragogy and

mentoring. In this retrospective mixed method study, ALPDEQ by Wilson (2005) was used followed by interviews. The study revealed that professional development opportunities failed to support novice instructors effectively and suggested PD designs consider adults' *Need to know*, *Self-direction*, *readiness*, and *Orientation to learning*. Additionally, the study concluded that novice instructors are intrinsically motivated and require societal support and opportunities for job-embedded practice which can be achieved by utilising based on *Prior experiences*.

As for studies in Türkiye, the ones regarding the professional development of EFL instructors at the tertiary level (British Council & TEPAV, 2015) in particular call for a systematic approach related to the PD; however, to the best of the researcher's knowledge no study specifically focusing on this context within andragogy has been found. The study by Kılınç and Uzun (2020) reports that 166 studies were conducted on lifelong learning between 2010 and 2020 in Türkiye. However, only 10% of them were related to adult learning and some of them focused on K-12 settings or at lifelong learning centers. Additionally, it is possible to find studies focusing on PD of EFL instructors at the tertiary level using other adult learning theories including self-directed learning, reflective practice, informal learning and transformative learning (Doğan, 2016; Hamamcıoğlu, 2023; Kılıç, 2020; Tanış & Dikilitaş, 2018). Due to the unique context of preparatory classes at the tertiary level at foundation and state universities in Türkiye, studies congruent with andragogy were reported to portray the PDAs in this context.

Specifically, an exploratory study by Balbay et al. (2018) delved into the issues regarding PD practices of EFL instructors at the tertiary level. Study participants were from 20 different universities' preparatory or modern languages departments. According to the results, the differences between foundation and state

universities vary greatly. Therefore, the study highlights the need for a systematic policy which considers individual and contextual needs, prior experience and evaluation of learning. To that end, a teacher-led training system which is process-oriented was suggested in the study.

Likewise, the explanatory mixed study by Ayar (2019) examined the professional development needs and practices of EFL instructors at the tertiary level in the foundation and state universities. The study included 69 EFL instructors, 8 teacher trainers, and 4 school directors from 4 different preparatory programs. The questionnaire and the interview questions were designed in the light of other researchers in the context. The responses of instructors in both contexts highlighted the changes in their needs based on age, their need for self-direction and how their orientation to learning could change. At the foundation universities, the findings showed that EFL instructors had more positive perceptions regarding PDAs as they were aligned with their immediate needs. The same group was also reported to be more satisfied with the climate of the learning. On the other hand, professionals at state universities had a more qualified educational background because of their personal endeavors, but not due to PDAs offered. Also, challenges like lack of financial support, and systematic approach in state universities were reported in the study.

CHAPTER 3: METHOD

Introduction

The purpose of this chapter is to provide information about the methodology of this study. First, the research design and the setting are described. Next, the participants, methods of data collection and questionnaire used are presented in detail. Later, the details of the data analysis procedure are provided. Finally, the summary of this chapter is presented.

Research Design

This cross-sectional survey study is designed to investigate the perceptions of EFL instructors' learning experiences to ascertain extent to which professional development activities (PDA) in their institutions adhere to the *Adult Learning Principles* and *Process Design Elements*. The study also aims to examine if instructors' perceptions differ by gender, age, years of experience in ELT and HE, educational background, and the type of higher education institution. As stated by Fraenkel and Wallen (2006), this type of survey could be employed to gather information from the representative sample to describe some characteristics of the population at a single time. Therefore, a representative group of instructors at the tertiary level were surveyed to collect information on how they perceive their learning experiences related to PD activities in their institutions based on *Adult Learning Principles* and *Process Design Elements*. For these purposes, the following research questions were explored:

1. To what extent do EFL instructors in higher education perceive their professional development activities (PDAs) as adhering to the *Principles of Adult Learning*?
2. To what extent do EFL instructors in higher education context perceive their PDAs as aligning with the *Process Design Elements*?
3. Do the EFL instructors' perceptions differ by gender, age, years of experience in ELT and in higher education, educational background, and type of higher education institution?

Setting

The study took place at the three state and two foundation universities in the School of Foreign Languages (SFL) in Izmir as the setting chosen for this study holds great diversity to represent the population. Table 1 shows that out of the total number of participants ($N=137$), 66.4% were from state universities ($n= 91$) while 33.6% were from foundation universities ($n=46$).

Table 1

Participating SFLs ($N = 137$)

Participating SFLs	Type of higher education	<i>n</i>	%
A, B and C	State	91	66.4
D and E	Foundation	46	33.6

The participating universities display similarities and differences in their preparatory program designs, PD practices, and the backgrounds of instructors and learners. The medium of instruction is English (EMI) in the foundation universities and there is only one state university following an English medium of instruction in Izmir. In the other state universities, the medium of instruction is either partially

English with a 30 per cent (T-EMI) or in English (EMI) depending on the departments. All universities have a school of foreign languages (SFL), and each SFL offers a preparatory program to ensure transition to departments to teach general English and prepare learners to meet their academic needs in their departments. As for the PD designs, there are differences between foundation and state university preparatory programs (Ayar, 2019; Balbay et al., 2018). Each of these schools in Izmir has its own CPD or PD units and they provide externally or internally provided training and events depending on the needs and sources at hand. To understand the settings better, participants in this study were also surveyed regarding the types of PDAs offered to them. Overall, workshops are the most common type of PDA offered in both state and foundation universities, but this is followed by seminars and webinars in state universities while foundation universities employ other types of PDAs such as observation and team teaching. The types of professional development activities are also evidenced in participating universities' websites. As stated on schools' websites, state universities offer mentoring, team teaching and mentoring during the orientation period only for newly recruited instructors. Additionally, they organize events, seminars, and workshops for in-service training. One of these universities states on its webpage that the professional development unit also devises collaborative workshops with instructors depending on their needs and interests. The same university mentions that it holds interinstitutional professional seminars to increase cooperation and learning with primary and secondary schools within MoNE (Ministry of National Education). One of the foundation universities states that it offers classroom observation, workshops, reflective practice, short courses, and projects on its webpage. The type of activities and their content are said

to be determined by unit heads and administration. The other foundation university runs a mentoring system for the professional development of instructors.

The variety of practices at SFL at different universities seems to validate the findings of the British Council and TEPAV report (2015), which highlights the need for a systematic approach to PD at the tertiary level. Finally, unlike state universities, there is an appraisal system and participation in PDAs is compulsory in foundation universities. The remaining three universities that did not take part in the research either did not offer PDAs or did not accept researchers outside their institutions.

Participants

137 EFL instructors from 5 different SFL universities participated in the research by completing an online questionnaire (Appendix B) based on the constructs by Wilson (2005). Participation was voluntary. Based on the clustering number of participants, the following independent variables were grouped and reported in Table 2.

Table 2

Demographic Information (N = 137)

<i>Variable</i>	<i>n</i>	<i>%</i>
Gender		
Female	116	84.7
Male	21	15.3
Age range		
26-40	46	33.6
41-49	59	43.1
50 ⁺	32	23.4
Experience in ELT		
0-15	27	19.7
16-24	71	51.8
25 ⁺	39	28.5

<i>Variable</i>	<i>n</i>	<i>%</i>
Experience in HE		
0-15	40	29.2
16-24	73	53.3
25 ⁺	24	17.5
BA		
Teaching English as a Foreign Language	49	35.8
English Language	88	64.2
Other		
MA		
Teaching English as a Foreign Language	25	18.2
MA English Lang	28	20.4
MA Other	33	24.1
None	51	37.2
Ph.D		
English Language	10	7.3
Other	7	5.1
None	120	87.6
With/out Ph.D		
Without Ph.D	120	87.6
With a Ph.D	17	12.4
Other Certifications		
Celta_ICELT	14	10.2
Delta_Tesol	22	16.1
None	66	48.2
Other	35	25.5
Type of HE		
State	91	66.4
Foundation	46	33.6

The recruitment of instructors at the state and foundation universities is done in line with the regulations of HEC (Higher Education Council, 2018) in Türkiye. The enacted law for universities in 2018 requires at least a master's degree with a thesis in the field to be eligible for the positions. Also, instructors' exam results from YDS (a national standardized language exam), ALES (a national standardized test) which tests the knowledge of Turkish language and mathematic skills, and instructors' GPAs are taken into consideration when shortlisted for the teaching position. Finally, instructors' written exam or interview performance plays a role in their recruitment (T.C. Cumhurbaşkanlığı, 2018).

Questionnaire

The first two research questions aim to examine instructors' perceptions of their learning experiences in their institutions based on the *Adult Learning Principles* and *Process Design Elements*. Therefore, *Adult Learning Principles and Design Elements Questionnaire* (ALPDEQ), developed by Wilson (2005), has been chosen because it was based on the *Adult Learning Principles and Process Design Elements* by Knowles et al. (2020). The third research question aims to investigate if instructors' perceptions differ based on their profile. To this end, the first part of the questionnaire gathers information to profile the participants with a total of 11 items (Appendix B). This part surveys participants' gender, age, academic background, work experience, degrees, and certifications hold, as well as the type of higher education institution they work for. It also surveys the type of professional development activities offered to them.

In the second part (Appendix B), instructors are asked to circle the number that nearly represents their perceptions of their learning experience related to professional development activities offered in their current institution. The second

part consists of two sections with 43 items in total. The first section includes 21 items on *Adult Learning Principles*, which are *the Need to know*, *Self-directness*, *Prior experience*, *Readiness*, and *Motivation*. The second section has 22 items on *Process Design Elements*, which are *Preparing the learner*, *Climate setting*, *Setting learning objectives*, *Designing the learning experience*, *Learning activities* and *Evaluation of learning*. The instructors' responses are rated on a 5-point scale ranging as follows: 1 (strongly disagree), 2 (disagree), 3 (neither disagree or agree), 4 (agree), and 5 (strongly agree). Finally, instructors are asked to leave their comments at the end of each section. It takes 20 minutes to complete the questionnaire with 54 items in total.

Most of the scales indicate strong reliability and overall internal consistency of items in Wilson's study (2005). For andrological principles, Cronbach's alpha coefficients of the scale for *the Need to know*, *Self-directness*, *Prior experience*, *Readiness*, and *Motivation* were .760, .739, .839, .811 and .933 respectively. One of the assumptions, *Orientation to learning* did not emerge in the study. For the *Process and Design Elements*, Cronbach's alpha coefficients of *Preparing the learner*, *Climate setting*, *Setting objectives*, *Designing learning experiences*, *Learning activities* and *the Evaluation of learning* were .875, .910, .903, .943, .682, .910 respectively. It was not possible to measure *the Diagnosis of learning needs*, as it occurred at the institutional level in Wilson's study (2005). Thus, this *Process Design Element* was removed from the survey instrument in Wilson's study. Initially, the questionnaire was designed to explore the graduate students' perception of their learning experience in a specific adult learning situation, and it also aimed to investigate their perceptions of the design and the delivery of their learning. That is,

the scale was developed to survey students as adult learners following a learning experience with an andragogical approach.

Adaptations

Having instructors as the focus of this study, the adaptations in the wording of items were done to explore how instructors at the tertiary level context perceive their learning experience related to professional development activities (PDA) in their institutions within the framework of *Adult Learning Principles and Process Design Elements*.

Originally, this section of the questionnaire aimed to explore adult graduate students' perceptions of their learning experience in a specific adult learning situation; however, having instructors as participants and aiming at exploring their perceptions of PDAs within the *Adult Learning Principles and Process Design Elements* necessitated some adaptations in the questionnaire. First, for all the items the tense used was changed from past to present to evaluate instructors' general perceptions of their learning experiences provided through professional development activities in their institutions. Also, instead of using the phrase 'in this learning experience' in the original questionnaire, 'in the PD activities' or 'during the PD activities in my institution' were used in all items.

Additionally, in the first section changes were made in items 14,15,18, and 20 measuring *Motivation*. In the original questionnaire, participants were asked to reflect on the effectiveness of their learning in both their lives and work in these items. So as not to cause ambiguity, the phrase 'in my life' was removed, but 'in my work' was kept. Items 9,10 and 12 were paraphrased for clarity purposes.

In the second section, the word 'learners' was changed to 'participants' in items 6, 9, 10, 11, 15, 17, and 19. Also, the word 'instructor' was replaced by

facilitator/trainer the items 4, 5, 6, 8, 9, 10, 12, 13, 15, and 18. Finally, items 2, 12, and 13 necessitated changes in the wording for clarity purposes.

Constructs & Accompanying Items

There are five constructs in relation to *Adult Learning Principles*. Each construct is measured through a set of items as given in Table 3.

Table 3

Constructs and Items: Adult Learning Principles

Constructs	Items
<i>Self-directedness</i>	1. I know why learning experiences in Professional Development Activities (PDAs) in my institution would be beneficial to me. 2. I am satisfied with the extent to which I am an active partner in learning experiences in PDAs. 3. I feel that I have control over my learning experiences during PDAs.
<i>Need to Know</i>	4. It is clear to me why I need to participate in the PD activities offered. 5. I feel responsible for my own learning during PD activities. 6. The work issues that motivate me for the learning experiences are understood 7. I feel I have a role to play in my own learning during the PD activities.
<i>Readiness</i>	8. I understand why the learning methods used in PDAs are right for me. 9. The work issues that motivate me for learning experiences in PDAs are respected. 10. Learning experiences in PDAs are just what I need given my needs or changes in my work.
<i>Prior Experience</i>	11. I feel my prior work experiences help my learning. 12. My work experiences are a regular part of learning experiences in PDAs. 16. I feel my work experiences are a resource for PDAs.

Constructs	Items
<i>Motivation</i>	13. I feel better able to perform work-related tasks due to learning experiences in PDAs. 14. I feel that mastery of PDAs will benefit my work. 15. Knowledge gained in learning experiences in PDAs can be immediately applied to my work. 17. Learning experiences in PDAs tap my inner drive to learn. 18. I feel learning experiences in PDAs will assist me in resolving a work-related problem. 19. Learning experiences in PDAs motivate me to give my best effort. 20. I feel that learning experiences in PDAs will make a difference in my work. 21. Learning experiences in PDAs motivate me to learn more.

As for *Process Design Elements*, there are six constructs, and their accompanying items are as follows (Table 4).

Table 4

Constructs & Items: Adult Process Design Elements

Constructs	Items
<i>Preparing the Learner</i>	1. Sufficient steps are taken to prepare me for the learning process in PDAs. 2. The way my responsibilities are clarified is appropriate for learning experiences in PDAs. 3. The way I am prepared for learning experiences in PDAs gives me the confidence I need.
<i>Climate Setting</i>	4. The facilitator(s) trainer(s) and I work together to prepare me for learning experiences in PDAs. 5. There is an adequate amount of dialogue with my facilitator(s)/trainer(s) regarding my learning needs. 6. Participants are full partners with the facilitator(s)/trainer(s) in learning experiences in PDAs. 7. The climate in learning experiences in PDAs can be best described as collaborative. 8. The facilitator (s) /trainer(s) act as a rich resource for my learning in PDAs. 9. The facilitator(s) /trainer(s) develop good rapport with participants in PDAs.

Constructs	Items
<i>Setting Objectives</i>	10. The facilitator(s)/ trainer(s) and participants negotiate the learning objectives in PDAs. 11. Participants are encouraged to set their own individual learning objectives. 12. The facilitator(s)/ trainer(s) solicit input from participants regarding learning objectives. 14. I have flexibility in designing my learning experiences (activities, etc.). 15. Participants and the facilitator(s)/ trainer(s) become partners in setting learning objectives. 17. Participants are encouraged to jointly design how their learning would occur in PDAs.
<i>Designing Learning Experiences</i>	13. Evaluation tools are used that help the facilitator(s)/trainer(s) and me work together to identify my learning needs. 16. There are mechanisms in place to collaboratively design which learning activities would be used.
<i>Learning Activities</i>	18. The facilitator(s)/trainer(s) rely too heavily on lectures in PDAs. 19. The way learning experiences in PDAs are conducted makes participants passive learners.
<i>Evaluation of Learning</i>	20. The methods used to evaluate my learning in PDAs are appropriate. 21. Evaluation methods used in PDAs meet my needs. 22. Evaluation methods help me diagnose my needs for further learning.

Reliability Analysis

After the data collection from 137 participants, the instrument ALPDEQ (Wilson, 2005) used to collect the data was evaluated for internal consistency. Table 5 demonstrates the alpha level of the *Adult Learning Principles and Process Design Elements* as well as the overall Cronbach's alpha of the questionnaire.

Table 5*Cronbach's Alpha: ALPDEQ*

Framework	α
Adult Learning Principles	.95
Process Design Elements	.94
ALPDEQ	.96

The overall Cronbach's alpha results for *Adult Learning Principles* and *Process Design Elements* show the scale results demonstrate high internal consistency, with all values exceeding .7, more specifically .95, .94 and .96, respectively.

When the constructs under the concept of *Adult Learning Principles* were analyzed (Table 6), the alpha values for most constructs indicated acceptable to high internal consistency.

Table 6*Cronbach's Alpha: Adult Learning Principles*

Constructs	α
Need to Know	.83
Self-directedness	.70
Prior Experience	.68
Readiness	.83
Motivation	.94

Cronbach's alpha values for the constructs the *Need to know* and *Readiness* were both found to be .83, exceeding the recommended threshold of .70 and indicating a good internal consistency. Likewise, Cronbach's alpha value for *Self-*

directedness was at an acceptable level of .70. Cronbach's alpha for *Motivation* was quite high at .94. Finally, the value of *Prior experience* had a value of .68, which is slightly below the recommended threshold of .70.

When the constructs under the concept of *Process Design Elements* were analyzed (Table 7), the alpha values for most constructs also indicated acceptable to high internal consistency.

Table 7

Cronbach's Alpha: Process Design Elements

Constructs	α
Preparing the Learner	.81
Climate Setting	.91
Setting Objectives	.89
Designing Learning Experiences	.79
Learning Activities	.67
Evaluation of Learning	.94

However, while the majority of constructs within the *Process Design Elements* scale demonstrated high internal consistency, the *Learning activities* exhibited a lower value of .67, which could be regarded as an acceptable level of Cronbach alpha as suggested by Taber (2018).

Method of Data Collection

After receiving approval of the Ihsan Doğramacı Bilkent University Ethics Committee, a proposal summary was prepared along with the necessary ethics committee forms for the participating universities. Once the approvals were obtained from participating universities, related SFLs were sent invitations and the link to the online questionnaire via e-mail. The participants were given a month to complete the questionnaire. The purpose of the study and time estimations for the completion of

the questionnaire were communicated in the invitation and Google Forms. Also, the anonymity and confidentiality of the participants were ensured in the consent form. Participants were also assured that collected data would be kept on a password-protected computer by the researcher and would only be used for this thesis and possible related conference presentations.

Methods of Data Analysis

Quantitative data SPSS from the survey were analyzed through Statistical Package for the Social Sciences (22.0). For research questions 1 and 2 descriptive statistics were employed for frequencies, percentages, and the mean and standard deviation of the answers. Additionally, the comments provided by the participants at the end of each section were categorized based on the constructs within ALPDEQ to further explain and enrich the findings. The results of these were reported in the next chapter.

Following this, inferential statistics were employed to address research question 3, i.e. if instructors' perceptions differed based on their demographic characteristics. Prior to inferential statistics, assumptions of normality and homogeneity of variances were checked both numerically and visually as suggested by Larson-Hall (2010). Specifically, the results of the Kurtosis and Skewness value, which was taken as ± 3.24 as suggested by Kim (2013) for medium-sized samples ($50 < n < 300$), and the results of Shapiro-Wilk were checked to decide whether to employ parametric or non-parametric tests. When each of the constructs in *Part I: Adult Learning Principle* was examined in the dataset, the normality assumption was found to be violated, as indicated by significant deviations from normality in the data distribution. To address this, non-parametric tests- the Mann-Whitney U or Kruskal-

Wallis -were chosen as they allow for reliable statistical analysis without relying on the normality assumption (Larson-Hall, 2010).

As for the constructs in *Part II: Process and Design Elements*, the normality assumption was not met for the variables *Preparing the learner*, *Designing learning experiences*, and *Evaluation of learning* across the independent Therefore, Mann-Whitney U or Kruskal Walis was conducted to examine potential differences in EFL instructors' perceptions of these constructs. However, the assumptions for both *Climate setting* and *Setting objectives* were met for the following independent variables: gender, age, years of experience in ELT and HE, MA, and Ph.D. qualifications. Additionally, the *Climate setting* was normally distributed for the type of HE instructors work for. Similarly, responses given for *Setting objectives* based on Bachelor's Degree qualifications and other certifications met the assumptions for parametric tests Finally, responses given for *Learning activities based on* qualifications of Master's Degree and certifications were normally distributed Therefore, an independent t-test or one-way ANOVA was used to investigate if EFL instructors' perceptions differ based on these as mentioned in Table 8. The tests used for each variable are shown in Table 8 below.

Table 8

Tests Used for Independent Variables

Independent Variable	Adult Learning Principles	Adult Process and Design Elements
1. Gender	Mann-Whitney U	<u>Mann-Whitney U</u> Preparing the Learner Designing Learning Experiences Learning Activities Evaluation of Learning <u>Independent t-test</u> Climate Setting Setting Objectives

Independent Variable	Adult Learning Principles	Adult Process and Design Elements
2. Age	Kruskal-Wallis	<u>Kruskal-Wallis</u> Preparing the Learner Designing Learning Experiences Learning Activities Evaluation of Learning <u>One-way ANOVA</u> Climate Setting Setting Objectives
3. Experience in ELT	Kruskal-Wallis	<u>Kruskal-Wallis</u> Preparing the Learner Designing Learning Experiences Learning Activities Evaluation of Learning <u>One-way ANOVA</u> Climate Setting Setting Objectives
4. Experience in HE	Kruskal-Wallis	<u>Kruskal-Wallis</u> Preparing the Learner Climate Setting Designing Learning Experiences Learning Activities Evaluation of Learning <u>One-way ANOVA</u> Setting Objectives
5. BA	Mann-Whitney U	<u>Mann-Whitney U</u> Preparing the Learner Climate Setting Designing Learning Experiences Learning Activities Evaluation of Learning <u>Independent t-test</u> Setting Objectives
6. MA	Kruskal-Wallis	<u>Kruskal-Wallis</u> Preparing the Learner Designing Learning Experiences Evaluation of Learning <u>One-way ANOVA</u> Climate Setting Setting Objectives Learning Activities

Independent Variable	Adult Learning Principles	Adult Process and Design Elements
7. Ph.D.	Kruskal-Wallis	<u>Kruskal-Wallis</u> Preparing the Learner Designing Learning Experiences Learning Activities Evaluation of Learning <u>One-way ANOVA</u> Climate Setting Setting Objectives
8. Ph.D. (with/out)	Mann-Whitney U	<u>Mann-Whitney U</u> Preparing the Learner Designing Learning Experiences Learning Activities Evaluation of Learning <u>Independent t-test</u> Climate Setting Setting Objectives
9. Other certification	Kruskal-Wallis	<u>Kruskal-Wallis</u> Preparing the Learner Designing Learning Experiences Evaluation of Learning <u>One-way ANOVA</u> Setting Objectives Learning Activities
10. Type of HE	Mann-Whitney U	<u>Mann-Whitney U</u> Preparing the Learner Setting Objectives Designing Learning Experiences Learning Activities Evaluation of Learning <u>Independent t-test</u> Climate Setting

The findings of *Adult Learning Principles and Process Design Elements* are enriched with the open-ended responses of the instructors. Table 9 demonstrates the number and frequency of responses given by the schools of foreign languages.

Table 9*Open-ended responses for the Adult Learning Principles and Process Design**Elements (N=38)*

<i>SFLs</i>	<i>State Universities</i>	<i>Foundation Universities</i>	<i>Total</i>
<i>Comments for ALP</i>			
<i>n</i>	13	8	21
<i>f</i>	54%	57%	55%
<i>Comments for APDE</i>			
<i>n</i>	11	6	17
<i>f</i>	46%	43%	45%
<i>Total number of comments by schools</i>			
<i>n</i>	24	14	38
<i>f</i>	63%	37%	100%

As can be seen in Table 9, 55% of the responses provided are about *Adult Learning Principles* and 45% of them concern *Process Design Elements*.

Specifically, most of the responses are from state universities with 63% while 37% of them are from foundation universities. Specifically, there are more comments on *Adult Learning Principles* from foundation universities, but the number of comments from instructors in state universities is, on average, higher.

The constructs in the study's framework initially served as themes and were used to categorize and code the responses deductively.

Figure 2*Sample Analysis: Open-ended Responses**Responses Related to Self-directedness*

Theme	Participant number	Sub-Themes	Comments by EFL Instructors
<i>Self-directedness</i>	30	<i>Autonomy</i>	I usually prefer to do research on what I need and learn how to handle some situations. I try to read and learn about my needs and choose what PDAs I need in online platforms and join them and try to find answers to my questions.
	32	<i>Bottom-up approach</i>	I have answered all the items in accordance with the learning experiences in PDAs in my current institution. Normally I strongly believe in the constructive power of PDAs when they are offered according to the specific needs and background of the teachers.
	71	<i>Context and Relevance</i>	I have always felt that PDAs are fun and useful when we are <u>actually involved</u> in them. But they do not match the class/school reality. Not with the university context, where there are so many constraints. Sometimes the workload itself makes such activities less attractive. You start to question: 'I have a class to prepare for, I have papers to grade. What am I doing <u>here</u> ?'

Next, sub-themes were identified both deductively and inductively (Figure 2).

Although the responses were limited, they were still instrumental in emphasizing or eliciting, key aspects.

CHAPTER 4: RESULTS

Introduction

This chapter aims to report the findings of the study on how EFL instructors in higher education contexts perceive their learning experiences related to professional development activities (PDA) in their institutions based on *Adult Learning Principles* and *Process Design Elements* (Knowles et al., 2020).

The first research question concerns the perceptions of EFL instructors in the higher education context within the *Adult Learning Principles*. There are 5 constructs within the framework which are *Need to know*, *Self-directness*, *Prior experience*, *Readiness*, and *Motivation*.

The second research question examines how EFL instructors in the higher education context perceive their learning in relation to the *Process Design Elements* in the professional development activities (PDA) in their institutions. It is explored within the six constructs which are *Preparing the learner*, *Setting objectives*, *Climate setting*, *Designing the learning experience*, *Learning activities* and *Evaluation of learning*.

The third research question investigates if EFL instructors' perceptions vary based on gender, age, experience, educational background, and the type of higher education they work for.

For all the questions first, descriptive statistics were employed, further explained and enriched by the responses provided in the open-ended questions at the end of sections. As for the third question, inferential statistics were conducted.

To analyze the descriptive data SPSS Statistics 24.0 program was employed. To see the reliability of the items in the questionnaire, Cronbach's alpha was checked. It was found higher than 0.70. As previously mentioned in Chapter 3, instructors' responses were rated on a 5-point scale ranging as follows: 1 (strongly disagree), 2 (disagree), 3 (neither disagree or agree), 4 (agree), and 5 (strongly agree). The responses were entered into the SPSS program.

ALPDEQ

Adult Learning Principles and Process Design Elements Questionnaire

(ALPDEQ) consists of two main parts as shown below in Table 10.

Table 10

Framework (N = 137)

Framework	<i>M</i>	<i>SD</i>
Adult Learning Principles	3.86	0.60
Process Design Elements	3.42	0.69

As indicated in Table 10, the overall mean score for *Adult Learning Principles* was 3.86 with a standard deviation of 0.60. That is, instructors mostly perceived the consideration given to the *Adult Learning Principles* positively in the PDAs offered to them.

The responses given for the *Process Design Elements* leaned towards agreement with a mean of 3.42 (*SD*= 0.69). The variability of the responses did not differ greatly for these constructs either.

Table 11

Adult Learning Principles (ALP) (N = 137)

Constructs	<i>M</i>	<i>SD</i>
Self-directedness	3.85	0.74
Need to Know	4.07	0.63

Constructs	<i>M</i>	<i>SD</i>
Readiness	3.63	0.73
Prior Experience	4.00	0.72
Motivation	3.78	0.75
Overall	3.87	0.60

Table 11 presents how EFL instructors perceived their learning experiences in PDAs offered within the framework of *Adult Learning Principles*. The responses for *Need to know* indicated the highest agreement, with the lowest variability ($M=4.07$, $SD=0.63$) followed by *Prior experience* ($M=4$, $SD=0.72$). However, *Readiness* and *Motivation* had a relatively lower mean ($M=3.63$ and $M=3.78$) respectively with a higher variability with values ranging from 0.72 to 0.75.

Table 12

Adult Process Design Elements (APDE) (N = 137)

Constructs	<i>M</i>	<i>SD</i>
Preparing the Learner	3.48	0.73
Climate Setting	3.62	0.73
Setting Objectives	3.50	0.76
Design Learning Experiences	3.30	0.86
Learning Activities	2.79	0.78
Evaluation of Learning	3.19	0.80
Overall	3.31	0.77

Table 12 presents the consideration given to *Process Design Elements* in the PDAs as perceived by EFL instructors. Overall, EFL instructors remained neutral with the *Process Design Elements* with a mean of 3.31 ($SD=0.77$). Specifically, instructors agreed with the *Climate setting* ($M=3.62$, $SD=0.73$), *Setting objectives* ($M=3.50$, $SD=0.76$) and *Preparing the learner* ($M=3.48$, $SD=0.73$) with less variability in their responses. However, they remained neutral with the constructs

Designing learning experiences ($M= 3.30$, $SD= 0.86$), *Learning activities*- in which the items were reversed- ($M= 2.79$, $SD= 0.78$), and *the Evaluation of learning* ($M= 3.19$, $SD= 0.80$) with a higher variability in their responses.

Adult Learning Principles (ALP): Perceptions of EFL Instructors

The first research question intends to examine EFL instructors' perceptions of the PDAs within the *Adult Learning Principles* (*Self-directedness*, *Need to know*, *Readiness*, *Prior experience*, and *Motivation*). To this end, the frequency and percentages of the responses regarding EFL instructors' perceptions of the PDAs were calculated and reported in the tables (Appendix C). The mean and standard deviation of each construct were also calculated and presented below. Finally, instructors' comments provided at the end of this part were categorized and reported according to the themes from the conceptual framework. They were further grouped based on sub-themes.

ALP: Self-directedness

The first construct of *Adult Learning Principles* is *Self-directedness*. Table 13 shows the perceptions of instructors concerning the level of *Self-directedness* addressed in PDAs within their institutions.

Table 13

Central Tendency & Dispersion: Self-directedness

Items	<i>M</i>	<i>SD</i>
1. I know why learning experiences in PDAs in my institution would be beneficial to me.	4.04	1.01
2. I am satisfied with the extent to which I am an active partner in learning experiences in PDAs.	3.69	0.92
3. I feel that I have control over my learning experiences during PDAs.	3.84	0.90
Overall	3.85	0.74

As evidenced in Table 13, even though instructors agreed with the items related to *Self-directedness* with a mean of 3.85, responses demonstrated a high variability with a standard deviation above 0.90. Item 1 had the highest mean of 4.04, which shows that instructors agreed with this item the most. However, the standard deviation of 1.01 also indicates that instructors had different perceptions of this item. The variety of perceptions on these items concur with the fact that multiple variables play a role in the self-concept of the learner (Knowles et al., 2020; Merriam et al., 1991). That is, instructors' self-directedness may be influenced by individual, situational differences, or the purpose of the learning and therefore broad generalizations may be inappropriate.

Overall, the instructors generally exhibited a moderate to high level of tendency towards *Self-directedness* in the form of knowing the benefits, active partnership, and feeling control over their learning experiences in their institutions. These findings are also congruent with the self-concept of the adult learner and their need to be perceived as capable of self-direction as suggested by Knowles et al. (2020).

Some instructors also responded to open-ended questions. Table 14 below displays the responses given to the open-ended question at the end of Section 1 of the ALPDEQ.

Table 14*Responses Related to Self-directedness*

Theme	Participant number	Sub-Themes	Comments by EFL Instructors
<i>Self-directedness</i>	30	<i>Autonomy</i>	I usually prefer to do research on what I need and learn how to handle some situations. I try to read and learn about my needs and choose what PDAs I need in online platforms and join them and try to find answers to my questions.
	32	<i>Bottom-up approach</i>	I have answered all the items in accordance with the learning experiences in PDAs in my current institution. Normally I strongly believe in the constructive power of PDAs when they are offered according to the specific needs and background of the teachers
	35	<i>Bottom-up approach</i>	I believe PDAs should be planned through a bottom-up approach as each teacher has his/her own needs.
	71	<i>Context and Relevance</i>	I have always felt that PDAs are fun and useful when we are actually involved in them. But they do not match the class/school reality. Not with the university context, where there are so many constraints. Sometimes the workload itself makes such activities less attractive. You start to question: 'I have a class to prepare for, I have papers to grade. What am I doing here ?'

Overall, EFL instructors' responses concur with the self-concept of the learner and show the need for autonomy and the importance of personalized PDAs

and a bottom-up approach to planning. The instructor 30 reported navigating his or her learning experiences while participants 32, 35 and 127 highlighted the importance of bottom-up approach to address their needs. Finally, the response given by instructors 71 shows adults' self-direction may vary based on context and the purpose of the learning, aligning with the literature (Brockett & Hiemstra, 1991; Candy, 1991; Mocker & Spear, 1982; Pratt, 1988).

ALP: Need to Know

Another *Adult Learning Principle* is adults' *Need to know* why, what and how to participate in a learning experience. Table 15 presents EFL instructors' perceptions of the consideration given to their *Need to know* in PDAs provided to them.

Table 15

Central Tendency & Dispersion: Need to Know

Items	<i>M</i>	<i>SD</i>
4. It is clear to me why I need to participate in the PD activities offered.	4.01	0.83
5. I feel responsible for my own learning during PD activities.	4.23	0.73
6. The work issues that motivate me for the learning experiences are understood.	3.82	0.76
7. I feel I have a role to play in my own learning during the PD activities.	4.23	0.76
Overall	4.07	0.63

As demonstrated in Table 15, instructors mostly agreed with the items measuring *Need to know* with a mean of 4.07 (*SD*= 0.63). Item 4 had a higher standard deviation reflecting a more varied range of perspectives while other items had relatively lower variations indicating a more consensus among instructors. The responses given to item 6 also indicate that instructors are less content with the

consideration given to their needs, thus more dialogue may result in more relevant PDAs (Knowles et al., 2020).

Table 16

Responses Related to Need to Know

Theme	Participant number	Sub-Themes	Comments by EFL Instructors
<i>Need to know</i>	30	<i>Autonomy/Flexibility</i>	I usually prefer to do research on what I need and learn how to handle some situations. I try to read and learn about my needs and choose what PDAs I need in online platforms and join them and try to find answers to my questions.
	32	<i>Based on needs</i>	I have answered all the items in accordance with the learning experiences in PDAs in my current institution. Normally I strongly believe in the constructive power of PDAs when they are offered according to the specific needs and background of the teachers
	35	<i>Bottom-up approach</i>	I believe PDAs should be planned through a bottom-up approach as each teacher has his/her own needs.
	72	<i>Moderation</i>	Teachers might get inundated with too many PDAs, so they should be offered in moderation.
	127	<i>Mutual planning</i>	We have individual meetings about PDAs and our institution highly encourages us to promote professional development.

As seen in Table 16, instructors' responses related to *Need to Know* why, what and how to learn concur with the Principles of Adult Learning (Knowles et al.,

2020). While instructor 32 stated the *Need to know* and decide what to and how to learn, participant 127 acknowledged the benefits of one-to-one meetings to this end. Overall, as for what to learn, participants reported prioritizing their needs, and regarding how to learn they highlighted the importance of mutual planning in moderation.

ALP: Readiness

The next principle of adult learning is *Readiness* to learn. Table 17 reveals how EFL instructors perceive the level of consideration given to their *Readiness* to learn in PDAs in their institutions.

Table 17

Central Tendency & Dispersion: Readiness

Items	<i>M</i>	<i>SD</i>
8. I understand why the learning methods used in PDAs are right for me.	3.73	0.84
9. The work issues that motivate me for learning experiences in PDAs are respected.	3.76	0.83
10. Learning experiences in PDAs are just what I need given my needs or changes in my work.	3.42	0.86
Overall	3.63	0.73

As shown in Table 17, instructors mostly agreed with the items ($M=3.63$) with a standard deviation of 0.73 for *Readiness*. While instructors displayed a higher agreement with items 8 and 9, the last item stating professional activities address their work-related needs had a mean of 3.42 with an *SD* of 0.86. In other words, instructors had a neutral perception of this item with a higher standard deviation reflecting a more varied range of perspectives. This could be attributed to the fact that adults' readiness depends on life situations (Knowles et al., 2005), context or the

dependency of the learner (Pratt, 1988). Also, it can be inferred that these variables are not taken into consideration in PDAs. Identifying work or life-related issues and situations can compel adults to learn, and the learning experience can be meaningful when mutual anticipation of the situation and relevant assistance is attained (Knowles et al., 2020).

Table 18 demonstrates the analysis of EFL instructors' responses, based on the theme of *Readiness*, to the open-ended questions at the end of section 1.

Table 18

Responses Related to Readiness

Themes	Participant number	Sub-Themes	Comments by EFL Instructors
<i>Readiness</i>	32	<i>Based on needs</i>	I have answered all the items in accordance with the learning experiences in PDAs in my current institution. Normally I strongly believe in the constructive power of PDAs when they are offered according to the specific needs and background of the teachers.
	34	<i>Relevance</i> <i>Applicable</i>	We may not apply all the activities to our classroom settings but still they provide us with a vision.

Themes	Participant number	Sub-Themes	Comments by EFL Instructors
<i>Readiness</i>	71	<i>Life and work-related issues</i>	I have always felt that PDAs are fun and useful when we are actually involved in them. But they do not match the class/school reality. Not with the university context, where there are so many constraints. Sometimes the workload itself makes such activities less attractive. You start to question: ‘I have a class to prepare for, I have papers to grade. What am I doing here ?’
	72	<i>Timing</i>	Teachers might get inundated with too many PDAs, so they should be offered in moderation.
	106	<i>Different Stages of career</i>	I feel that the longer I have been teaching, the less professional development I need. I think as we get experienced, we should share that with our colleagues and especially those that are new to teaching our student profile! Professional development

Participants highlighted the importance of relevancy of PDAs offered to their needs in their context affirming their neutral stance to item 10 in the questionnaire. According to Table 18, participants 32, and 106 reported how their needs and therefore *Readiness* change based on experience while participant 72 reported too many PDAs may overwhelm instructors and could be offered based on *Readiness*. Finally, participants 34 and 71 stated that they value relevant and applicable learning experiences, which address their imminent needs.

ALP: Prior Experience

Another *Adult Learning Principle* is related to the *Prior experience* of the learner.

Table 19 displays how participants perceive whether their prior experience is taken into consideration or not in the PDAs offered to them in their institutions.

Table 19

Central Tendency & Dispersion: Prior Experience

Items	<i>M</i>	<i>SD</i>
11. I feel my prior work experiences help my learning.	4.42	0.73
12. My work experiences are a regular part of learning experiences in PDAs.	4.00	0.90
16. I feel my work experiences are a resource for PDAs.	4.01	0.78
Overall	4.00	0.72

As indicated in Table 19, the mean score for consideration given to *Prior experience* of the instructors in PDAs was 4.00 with a standard deviation of 0.72.

That is, instructors mostly agreed with the items in this construct. However, responses given to item 12 had the highest standard deviation indicating a diversity of perspectives. This item concerns to what extent work experiences are a regular part of the learning experiences in PDAs. The higher standard deviation could be due to various practices in PDAs in different types of higher education contexts. The findings are parallel to the claims that earlier experiences of adults can facilitate learning and serve as a rich repertoire for learning (Knowles et al., 2020).

Table 20 illustrates the analysis of EFL instructors' responses, related to the *Prior experience*, to the open-ended questions at the end of section 1.

Table 20*Responses Related to Prior Experience*

Theme	Participant Number	Sub-Themes	Comments by EFL Instructors
<i>Prior experience</i>	32		I have answered all the items in accordance with the learning experiences in PDA's in my current institution. Normally I strongly believe in the constructive power of PDA when they are offered according to the specific needs and background of the teachers.
	41		Overlap of my work experiences with PDA (experiences) gives you a sense of comfort/motivation on being on the right "path".
	59		Experience makes us learn easier.
	64	<i>Reflective</i>	When used together with my teaching experiences, PDAs support my teaching career.

As seen in Table 20, EFL instructors acknowledged the importance of *Prior experience* in facilitating their professional development. Additionally, they reported benefiting from PDAs and when the learning experiences were in line with their background and needs.

ALP: Motivation

The last construct of the questionnaire is *Motivation* to learn. Table 21 shows EFL instructors' agreement with the items related to *Motivation* in PDAs offered to them.

Table 21*Central Tendency & Dispersion: Motivation*

Items	<i>M</i>	<i>SD</i>
13. I feel better able to perform work-related tasks due to learning experiences in PDAs.	3.82	0.87
14. I feel that mastery of PDAs will benefit my work.	4.00	0.82
15. Knowledge gained in learning experiences in PDAs can be immediately applied to my work.	3.53	0.90
17. Learning experiences in PDAs tap my inner drive to learn.	3.86	0.80
18. I feel learning experiences in PDAs will assist me in resolving a work-related problem.	3.72	0.85
19. Learning experiences in PDAs motivate me to give my best effort.	3.77	0.96
20. I feel that learning experiences in PDAs will make a difference in my work.	3.80	0.84
21. Learning experiences in PDAs motivate me to learn more.	3.89	0.81
Overall	3.78	0.75

As seen in Table 21, the overall mean score for *Motivation* stood at 3.78 with a standard variation of 0.75. In other words, the responses of the instructors leaned towards agreement with the items related to *Motivation*, resulting in a mean score of 3.78. The standard deviation of 0.75 suggests a diversity of perceptions on this item.

Table 22 demonstrates the analysis of EFL instructors' responses, related to *Motivation*, for the open-ended questions at the end of Section 1.

Table 22*Responses Related to Motivation*

Theme	Participant Number	Sub-Themes	Comments by EFL Instructors
<i>Motivation</i>			
	47	<i>Intrinsic value</i>	It is always a privilege to participate in PDAs. In each PDA, a useful piece of information can be acquired.
	55	<i>Intrinsic value</i>	The more you learn, the more you want to learn!
	72	<i>Different stages of career</i>	In fact, the motivation to participate in PDAs decreases after teaching actively over 20 years.
	73	<i>Personal pay off</i> <i>Intrinsic value</i>	I have taken part in many professional development activities, and I have learned a lot.
	77	<i>Intrinsic value</i>	I think PDAs will help adult learners go on learning new things. They will also develop their ways of learning. Thanks for sharing this with me.
	93	<i>Intrinsic value</i>	Learning experiences in PDAs make one to be more engaged in lifelong learning.
	100	<i>Intrinsic value</i>	The more professional development teachers get, the more likely students are to succeed.
	106	<i>Different stages of career</i>	I feel that longer I have been teaching, the less professional development I need. I think as we get experienced, we should share that with our colleagues and especially those that are new to teaching our student profile! Professional development helped me when I first started!

Theme	Participant Number	Sub-Themes	Comments by EFL Instructors
<i>Motivation</i>			
	122	<i>Intrinsic value</i>	Learning experiences in PDAs increase my motivation.
	123	<i>Intrinsic value</i> <i>Personal pay off</i>	The institution I work provides me with great opportunities for my professional development.
	131	<i>Intrinsic value</i> <i>Personal pay off</i>	The PDAs are very beneficial and teach me so much.
	137	<i>Intrinsic value</i> <i>Personal pay off</i>	I highly benefit from personal development activities.

As reported in Table 22, most EFL instructors are intrinsically motivated and their motivation increases when there is personal meaning which is parallel to Knowles et al.'s claim (2020). Equally, these comments concur with the fact that adults' personal values and belief systems determine the motivators for them as stated by Knowles et al. (2020). Finally, these findings are congruent with Vroom's expectancy theory (1995), which suggests adults are motivated when they believe they can be successful (expectancy), that learning will benefit them (instrumentality), and that the outcome will be valued by the learner (valence). Despite the overall agreement with this construct, some participants reported that their motivation to join PDAs decreased which could be because of relevance, dependency or prior experience.

Adult Process Design Elements (APDE): Perceptions of EFL Instructors

The second research question intends to examine EFL instructors' perceptions of the PDAs provided to them within the *Process Design Elements* (*Preparing the learner, Climate setting, Setting objectives, Designing learning*

experiences, Learning activities and Evaluation of learning). To this end, the frequency and percentages of the responses regarding EFL instructors' perceptions of the PDAs were calculated and reported in the tables (Appendix C). The mean and standard deviation of each construct were also calculated and presented below. Finally, instructors' comments provided at the end of this part were categorized and reported according to the themes from the conceptual framework. They were further grouped based on sub-themes.

APDE: Preparing the Learner

The first *Process Design Element* concerns how adult learners are prepared for their learning experiences. Table 23 shows EFL instructors' perceptions of the way they are prepared for the PDs in their institutions.

Table 23

Central Tendency & Dispersion: Preparing the Learner

Items	<i>M</i>	<i>SD</i>
1. Sufficient steps are taken to prepare me for the learning process in PDAs.	3.29	0.89
2. The way my responsibilities are clarified is appropriate for learning experiences in PDAs.	3.54	0.83
3. The way I am prepared for learning experiences in PDAs gives me the confidence I need.	3.61	0.86
Overall	3.48	0.73

As evidenced in Table 23, instructors leaned towards agreement with the items related to the way they are prepared for the learning experience. The mean scores for the items ranged from 3.29 to 3.61 with a high standard deviation suggesting diverse perceptions of the instructors. Instructors displayed the lowest agreement ($M=3.29$) with a higher standard deviation (0.89) with the first item,

which concerns whether sufficient steps are taken to prepare for the learning experience.

APDE: Climate Setting

Another important *Process Design and Element* is related to *Climate setting* that is conducive to learning. Table 24 presents how EFL instructors perceive the way the climate is set for their learning experiences in PDAs in their current institutions.

Table 24

Central Tendency & Dispersion: Climate Setting

Items	<i>M</i>	<i>SD</i>
4. The facilitator(s) trainer(s) and I work together to prepare me for learning experiences in PDAs.	3.39	0.95
5. There is an adequate amount of dialogue with my facilitator(s)/trainer(s) regarding my learning needs.	3.42	0.96
6. Participants are full partners with the facilitator(s)/trainer(s) in learning experiences in PDAs.	3.54	0.86
7. The climate in learning experiences in PDAs can be best described as collaborative.	3.87	0.82
8. The facilitator (s) /trainer(s) act as a rich resource for my learning in PDAs.	3.66	0.86
9. The facilitator(s) /trainer(s) develop good rapport with participants in PDAs.	3.84	0.84
Overall	3.62	0.73

Regarding the *Climate setting*, instructors' responses showed variation from 3.39 to 3.84 with an *SD* of 0.73 to 0.96, suggesting variation in their responses. That is, while some EFL instructors perceived the climate conducive to learning, others' responses leaned towards disagreement. Among the individual items, item 7 had the highest mean score ($M=3.87$), indicating that the climate in PDA learning

experiences was perceived as collaborative while item 4 had the lowest mean score ($M=3.39$) showing instructors' need for more dialogue about learning needs with the facilitator or trainer. This need is also related to the "human and interpersonal climate" mentioned by Knowles et al. (2020, p. 55) and is crucial for collaboration and participation in adult learning.

Table 25 presents EFL instructors' comments related to *Climate setting*, to the open-ended questions at the end of section 2.

Table 25

Response Related to Climate Setting

Theme	Participant Number	Comments by EFL Instructors
<i>Climate setting</i>	39	I feel that we are all encouraged to create a better learning atmosphere in our classrooms with the help of PDAs.

As stated by participant 39, a positive climate set during PDAs can be observed in classroom practice.

APDE: Setting Objectives

Another element in *Process Design* is *Setting objectives*. Table 26 presents EFL instructors' perceptions of how the PD objectives are set in PDAs in their institutions.

Table 26

Central Tendency & Dispersion: Setting Objectives

Items	<i>M</i>	<i>SD</i>
10. The facilitator(s)/ trainer(s) and participants negotiate the learning objectives in PDAs.	3.53	0.95
11. Participants are encouraged to set their own individual learning objectives.	3.44	1.02

Items	<i>M</i>	<i>SD</i>
12. The facilitator(s)/ trainer(s) solicit input from participants regarding learning objectives.	3.52	0.90
14. I have flexibility in designing my learning experiences (activities, etc.).	3.72	0.98
15. Participants and the facilitator(s)/ trainer(s) become partners in setting learning objectives.	3.53	0.87
17. Participants are encouraged to jointly design how their learning would occur in PDAs.	3.30	0.93
Overall	3.5	0.76

As seen in Table 26, instructors mostly leaned towards agreement with the items related to *Setting objectives* with a mean of 3.5 and a standard deviation of 0.76. Instructors expressed their lowest agreement with items 11 and 17 highlighting the need to have more voice in *Setting objectives*.

Similarly, there is a reported need among instructors to actively contribute to *Setting objectives* in their institutions (Table 27).

Table 27

Responses Related to Setting Objectives

Theme	Participant Number	Sub-Themes	Comments by EFL Instructors
<i>Setting objectives</i>	35	<i>Bottom-up approach</i>	As I have mentioned earlier, I believe PDAs should adopt a more bottom-up approach where all the instructors could actively participate in.
	90	<i>Top-down approach</i>	Administration sometimes uses PDA about what they want to change in the curriculum or working conditions disregarding the result of the activities
	91	<i>Top-down approach</i>	PDAs are decided by a committee overlooking the voices that can be heard by other ESL instructors.

Theme	Participant Number	Sub-Themes	Comments by EFL Instructors
<i>Setting objectives</i>	126	<i>Top-down approach</i>	It is impractical to have bespoke PDs as mostly the objective is to meet organizational needs such that most workshops or courses offered by trainers are designed with the trainers' main objectives or aims to achieve certain personal goals in mind.

Responses given by participants 35,90, 91 and 126 show that objectives are set based on institutional needs ignoring individual needs which may cause less interest in PDAs. As stated by Knowles et al. (2020) adults become more engaged in learning when they are involved in its creation. However, they show less interest in objectives that are irrelevant to their self-identified needs. As a result, creating objectives that are meaningful for them leads to greater ownership.

APDE: Designing Learning Experiences

How learning experiences are designed is another *Process Design and Element*. Table 28 demonstrates instructors' perceptions of the way their *Learning experiences* are designed in the PDAs offered.

Table 28

Central Tendency & Dispersion: Designing Learning Experiences

Items	<i>M</i>	<i>SD</i>
13. Evaluation tools are used that help the facilitator(s)/trainer(s) and me work together to identify my learning needs.	3.29	0.97
16. There are mechanisms in place to collaboratively design which learning activities would be used.	3.32	0.93
Overall	3.30	0.86

According to the data presented in Table 28, instructors maintained a neutral stance towards the use of evaluation tools and mechanisms to *Design learning activities* with a mean of 3.3 and *SD* of 0.86. The high standard deviation of the responses signals a variety of perceptions of participants.

Likewise, Table 29 reports instructors' comments regarding *Designing learning experiences* at the end of Section 2. As seen in the comments, instructors emphasized the need for continuity in PDAs and the importance of check-in and out meetings with the trainers.

Table 29

Responses Related to Designing Learning Experiences

Theme	Participant Number	Sub-Themes	Comments by EFL Instructors
<i>Designing learning experiences</i>	29	<i>Moderation</i>	Professional development activities should be done on a regular basis.
	35	<i>Bottom-up approach</i>	As I have mentioned earlier, I believe PDAs should adopt a more bottom-up approach where all the instructors could actively participate in.
	48	<i>Moderation</i>	I see the positive effects of PDAs immediately, but after some time I may lose my motivation. That's why, I think PDAs should be done on a regular basis.
	66	<i>Moderation</i>	I do believe that PDAs should be done on regular basis.
	86	<i>Moderation</i>	PDA is not emphasized enough in my institution. The intervals PDAs are held could be more frequent, rather than only at the end of semesters.

Theme	Participant Number	Sub-Themes	Comments by EFL Instructors
<i>Designing learning experiences</i>	113	<i>Moderation</i>	Check-in and check-out meetings with the trainer are beneficial for the teacher.

As evidenced in responses (Table 29), participants favour ongoing PDAs rather than one-shot sessions. This is also acknowledged by Knowles et al. (2020) and Merriam et al. (2007). In their terms, the role of the adult educator encapsulates facilitating the learning process by considering the characteristics of adults; therefore, experiential techniques- as opposed to the transmission- may be favoured provided they match the learners' preferences. Additionally, mechanisms or tools to ensure the continuity of PD designs were highlighted by the participants.

APDE: Learning Activities

Table 30 demonstrates how EFL instructors perceive the *Learning activities* in PDAs offered to them. There are two reversed items in this construct.

Table 30

Central Tendency & Dispersion: Learning Activities

Items	<i>M</i>	<i>SD</i>
18. The facilitator(s)/trainer(s) rely too heavily on lectures in PDAs.	2.97	0.89
19. The way learning experiences in PDAs are conducted makes participants passive learners.	2.63	0.91
Overall	2.80	0.90

As seen in Table 30, instructors remained neutral concerning the use of lecturing with a mean of 2.97, yet they disagreed or remained neutral with the fact that the PDAs offered to them make learners passive ($M=2.63$, $SD=0.90$). Overall, instructors' perception leaned towards a neutral stance regarding *Learning activities*

with a mean of 2.8 and a relatively high standard deviation of 0.90 indicates the variety of answers given by the participants.

Table 31 reports a response about *Learning activities* at the end of section 2.

Table 31

Responses Related to Learning Activities

Theme	Participant Number	Comments by EFL Instructors
<i>Learning Activities</i>	29	Professional development activities should be varied and should promote active participation.

As seen in the comment, PDAs should offer a range of activities that support active participation.

APDE: Evaluation of Learning

The last *Process Design Element* is related to how learning is evaluated in the PDAs offered to EFL instructors. Table 32 shows the perceptions of EFL instructors regarding *the Evaluation of Learning*.

Table 32

Central Tendency & Dispersion: Evaluation of Learning

Items	<i>M</i>	<i>SD</i>
20. The methods used to evaluate my learning in PDAs are appropriate.	3.24	0.82
21. Evaluation methods used in PDAs meet my needs.	3.32	0.83
22. Evaluation methods help me diagnose my needs for further learning.	3.18	0.86
Overall	3.19	0.80

As shown in Table 32, instructors maintained a neutral stance with a mean of 3.19 and a standard deviation of 0.80, suggesting a varied range of responses among instructors

Table 33 presents the comments given by EFL instructors related to the *Evaluation of learning* at the end of section 2.

Table 33

Responses Related to Evaluation of Learning

Theme	Participant Number	Sub-Themes	Comments by EFL Instructors
<i>Evaluation of Learning</i>	8	<i>Need for an evaluative system</i>	The third response for the evaluation of learning "Neither disagree or agree" can also mean "Not applicable" as we work for a state university.
	15	<i>Need for an evaluative system</i>	Because we are a state university, there is no evaluation of learning. We usually have workshops or seminars, but we don't have enough voice in PD activities.
	20	<i>Need for an evaluative system</i>	There should be more focus on evaluation.
	92		The evaluation of PDAs is very important to shed light on an instructor's future PD pathway.
	108		Evaluation methods compel me to be more creative.
	113		Check-in and check-out meetings with the trainer are beneficial for the teacher.

Theme	Participant Number	Sub-Themes	Comments by EFL Instructors
<i>Evaluation of Learning</i>	137		The evaluation process helps me improve.

As seen in Table 33, participants 92, 108, 113 and 137 reported benefiting from the evaluation process in foundation universities while such processes are absent in state universities. Participants 15, 20, and 92 expressed the lack of a system where learning is evaluated. They also underscored the necessity to address this so that they could reevaluate their needs and develop a sense of ownership in their learning, aligning with the literature (Kirkpatrick, 1970, 1998; Knowles et al., 2020). As stated by Knowles et al., adults' learning needs change in different situations in time, and necessitate learners to reevaluate their goals (2020).

Difference Based on EFL Instructor Profile: ALP & APDE

In line with the third research question, this part presents how EFL instructors perceive *Adult Learning Principles and Process Design Elements* based on gender, age, years of experience in ELT and HE, educational background (Bachelor's Degree, Master's Degree, Ph.D.) certifications they hold as well as the type of HE they work for. Next, whether these perceptions differed based on these variables was examined.

Gender

ALP & APDE

Table 34 below displays the means (M) and standard deviations (S) for *Adult Learning Principles*, and *Process Design Elements* categorized by gender. The study included 21 male and 116 female participants.

Table 34*ALP and APDE: Gender (N = 137)*

Framework	Male (n=21)	Female (n=116)
Adult Learning Principles		
<i>M</i>	3.86	3.87
<i>SD</i>	0.58	0.72
Process Design Elements		
<i>M</i>	3.39	3.30
<i>SD</i>	0.72	0.51

As for *Adult Learning Principles*, the combined mean score was 3.87, reflecting a consistent agreement across genders. Specifically, male participants demonstrated a mean score of 3.86 ($SD = 0.58$), while female participants exhibited a slightly higher mean of 3.87 ($SD = 0.72$), indicating that there was more agreement on *Adult Learning Principles* across male and female participants.

In the category of *Process Design Elements*, the overall mean was 3.35. Specifically, male participants had a mean score of 3.39 ($SD = 0.72$), while female participants had a slightly lower mean of 3.30 ($SD = 0.51$). This indicates a moderate level of agreement on *Process Design Elements*, with male participants showing slightly more variability, i.e. a slightly higher level of agreement, compared to their female counterparts.

To investigate potential differences in EFL instructors' perceptions related to *Adult Learning Principles* and *Process Design Elements* based on gender, the Mann-Whitney U test was employed (Table 35).

Table 35

Mann-Whitney U Test for the Comparison of EFL Instructors' Perceptions of ALPs and APDEs by Gender

Framework	<u>Mean Rank of Gender</u>		<u>Sum of Ranks</u>		<i>U</i>	<i>z</i>	<i>p</i>
	Male (<i>n</i> =21)	Female (<i>n</i> =116)	Male (<i>n</i> =21)	Female (<i>n</i> =116)			
Adult Learning Principles	73.83	68.13	1550.50	7902.50	1116.50	-.607	.544
Process Design Elements	73.14	68.25	1536.00	7917.00	1131.00	-.520	.603

The test results show no statistically significant differences in EFL instructors' perceptions based on their gender for any of the constructs.

Gender: ALP

Table 36 shows the descriptive statistics as to EFL instructors' perceptions in relation to the constructs of ALP by gender, namely *Self-directedness*, *Need to know*, *Readiness*, *Prior experience*, and *Motivation*.

Table 36

Adult Learning Principles (ALP): Gender (N = 137)

Constructs		Male (<i>n</i> =21)	Female (<i>n</i> =116)
Self-directedness	<i>M</i>	3.84	3.85
	<i>SD</i>	0.76	0.75
Need to Know	<i>M</i>	4.09	4.06
	<i>SD</i>	0.71	0.61
Readiness	<i>M</i>	3.69	3.62
	<i>SD</i>	0.98	0.68
Prior Experience	<i>M</i>	4.07	3.99
	<i>SD</i>	0.57	0.75

Constructs	Male (n=21)	Female (n=116)
Motivation		
<i>M</i>	3.68	3.79
<i>SD</i>	0.99	0.70

Among the *Adult Learning Principles*, the two constructs with the highest mean scores were *Need to know* and *Prior experience*. Specifically *Need to know* exhibited the lowest variability, indicated by the highest mean score of 4.09 ($SD = 0.71$) for male participants, and 4.06 ($SD = 0.61$) for female participants, suggesting a strong consensus among both male and female EFL instructors. *Prior experience* also showed a high mean score of 4.07 ($SD = 0.57$) for male participants and 3.99 ($SD = 0.75$) for female participants.

On the other hand, the two constructs with the lowest mean scores were *Readiness* and *Motivation*. *Readiness* demonstrated the highest variability, as evidenced by the lowest mean score of 3.69 ($SD = 0.98$) for male participants, and 3.62 ($SD = 0.68$) for female participants, indicating a lower level of agreement among both male and female instructors. Similarly, *Motivation* exhibited a lower mean score of 3.68 ($SD = 0.99$) for male participants, and 3.79 ($SD = 0.70$) for female participants suggesting a slightly lower consensus among the participants.

To investigate potential differences in EFL instructors' perceptions of ALP based on gender, a Mann-Whitney U test was conducted (Table 37).

Table 37

Mann-Whitney U Test for the Comparison of EFL Instructors' Perceptions of ALP by Gender

Constructs	<u>Mean Rank of Gender</u>		<u>Sum of Rank</u>		<i>U</i>	<i>z</i>	<i>p</i>
	Male (<i>n</i> =21)	Female (<i>n</i> =116)	Male (<i>n</i> =21)	Female (<i>n</i> =116)			
Need to Know	73.57	68.17	1545.00	7908.00	1122.	-.587	.557
Self-directedness	68.33	69.12	1435.00	8018.00	1204.	-.085	.932
Prior Experience	70.07	68.81	1471.50	7981.50	1037.50	-1.098	.272
Readiness	77.60	67.44	1629.50	7823.50	1195.50	-.142	.887
Motivation	68.60	69.07	1440.50	8012.50	1209.50	-.052	.959

As reported in Table 37, there were statistically no significant differences in EFL instructors' perceptions between male and female participants for any of the specified constructs.

Gender: APDE

Table 38 demonstrates how male and female EFL instructors perceive the *Adult Process Design Elements- Preparing the learner, Climate setting, Setting objectives, Designing learning experiences, Learning activities and Evaluation of learning-* in the provided PDAs in their institution.

Table 38

Adult Process Design Elements (APDE): Gender (N = 137)

Constructs		Male	Female
		(<i>n</i> =21)	(<i>n</i> =116)
Preparing the Learner	<i>M</i>	3.63	3.45
	<i>SD</i>	0.91	0.70
Climate Setting	<i>M</i>	3.61	3.62
	<i>SD</i>	0.96	0.69

Constructs		Male	Female
		(n=21)	(n=116)
Setting Objectives	<i>M</i>	3.48	3.50
	<i>SD</i>	0.99	0.72
Design Learning Experiences	<i>M</i>	3.35	3.29
	<i>SD</i>	0.97	0.85
Learning Activities	<i>M</i>	3.00	2.76
	<i>SD</i>	0.83	0.77
Evaluation of Learning	<i>M</i>	3.25	3.18
	<i>SD</i>	0.86	0.79

As demonstrated in Table 38, there were subtle variations across *Process Design Elements*. Male EFL instructors generally exhibited slightly higher mean scores in the areas of *Preparing the learner*, *Designing learning experiences*, *Learning activities*, and *Setting objectives* with means ranging from 3.48 to 3.63 for males and 3.45 to 3.62 for females. The highest variability was observed in the *Learning activities*, and the lowest in *Climate setting* and *Setting objectives* for both groups. Despite these nuanced differences, the overall patterns indicate both groups perceived the elements similarly.

The lowest agreement was related to the way the *Learning Activities* were designed for EFL instructors within the *Process Design Elements*. The items related to this subconstruct were reversed and examined if instructors felt passive during the learning activities. Male EFL instructors remained neutral with this subconstruct with a mean of 3 and *SD* of 0.83. Similarly, female EFL instructors remained neutral with the way learning activities were designed and to the extent these activities make them passive with a mean of 2.76 and *SD* of 0.77. There was a presence of moderate variability in *Evaluation of learning* for males ($M=3.25$, $SD= 0.86$) and females ($M=$

3.18, $SD=0.79$). *Designing learning experiences* also exhibited moderate variability for males ($M=3.35$, $SD=0.97$) and for females ($M=3.29$, $SD= 0.85$).

To examine potential differences in EFL instructors' perceptions of APDE based on gender, a Mann-Whitney U test was conducted for the subconstructs *Preparing the learner*, *Designing learning experiences*, *Learning activities* and *Evaluation of learning*- (Table 39). As for *Climate setting* and *Setting objectives*, an independent t-test was employed to this end (Table 40).

Table 39

Mann-Whitney U Test for the Comparison of EFL Instructors' Perceptions of APDEs by Gender

Constructs	<u>Mean Rank of</u>		<u>Sum of</u>		<i>U</i>	<i>z</i>	<i>p</i>
	Gender		Ranks				
	Male (<i>n</i> =21)	Female (<i>n</i> =116)	Male (<i>n</i> =21)	Female (<i>n</i> =116)			
Preparing the Learner	81.48	66.74	1711.00	7742.00	956.00	-1.589	.112
Designing Learning Experiences	71.90	68.47	1510.00	7943.00	1157.00	-.373	.709
Learning Activities	79.33	67.13	1666.00	7787.00	1001.00	-1.324	.186
Evaluation of Learning	72.40	68.38	1520.50	7932.50	1146.50	.441	.659

Table 39 demonstrates if EFL instructors' perceptions of the PDAs offered to them within the *Process Design Elements* differ by gender. As revealed in the test results, there were statistically no significant differences in EFL instructors' perceptions between males and females for any of the specified constructs.

Table 40 below demonstrates the findings of the independent t-tests regarding EFL instructors' perceptions of *Climate setting* and *Setting objectives* based on gender.

Table 40

The Results of the Independent T-test for Climate Setting & Setting Objectives by Gender

Constructs	Male		Female		<i>t</i> (135)	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Climate Setting	3.61	0.96	3.62	0.69	.063	.950
Setting Objectives	3.48	0.99	3.50	0.72	.126	.900

As indicated in Table 40, there was no significant difference in perceptions related to *Climate setting* between female ($M=3.62$, $SD=0.69$) and male ($M=3.61$, $SD=0.96$) instructors, with a t-test result of $t(135) = .063$, $p = .95$. Similarly, the perceptions of female EFL instructors ($M=3.50$, $SD=0.72$) and male EFL instructors ($M=3.48$, $SD=0.99$) were not statistically significant ($t(135) = .126$, $p = .90$).

Age

ALP & APDE

Table 41 displays the descriptive analysis of *Adult Learning Principles* and *Process Design Elements* in three age groups-26-40; 41-49; and 50⁺.

Table 41

ALP and APDE: Age ($N = 137$)

Framework		26-40 (<i>n</i> =46)	41-49 (<i>n</i> =59)	50 ⁺ (<i>n</i> =32)
Adult Learning Principles	<i>M</i>	3.94	3.80	3.87
	<i>SD</i>	0.44	0.73	0.55
Process Design Elements	<i>M</i>	3.40	3.41	3.46
	<i>SD</i>	0.67	0.73	0.65

As demonstrated in Table 41, the 41-49 age group exhibited the highest variability, suggesting a relatively diverse range of opinions within this group concerning *Adult Learning Principles*. Conversely, the 50⁺ age group demonstrated the lowest variability. A similar trend was observed for *Process Design Elements*, with the 41-49 age group showing the highest variability and the 50⁺ group displaying the lowest.

Overall, mean scores for *Process Design Elements* were relatively lower compared to *Adult Learning Principles* across all age groups (Table 50). As regards *Adult Learning Principles*, the 26-40 age group had the highest mean ($M = 3.94$) with less variability in responses. As for *Process Design Elements*, the 50⁺ age group had the highest mean ($M = 3.46$), indicating a relatively higher level of agreement.

To examine possible differences in EFL instructors' perceptions of ALP and APDE based on their age, the Kruskal-Wallis test was employed (Table 42).

Table 42

Kruskal-Wallis Rank Score Test for the Comparison of EFL Instructors' Perceptions of ALPs and APDE Based on Age

Framework	<u>Mean Rank of Age</u>			χ^2	df	p
	26-40 ($n=46$)	41-49 ($n=59$)	50+ ($n=32$)			
Adult Learning Principles	73.01	66.68	67.52	0.717	2	.699
Process Design Elements	67.88	69.48	69.72	0.056	2	.972

As demonstrated in Table 42, the Kruskal-Wallis test results indicated that there were no significant differences in EFL instructors' perceptions of *Adult Learning Principles* and *Process Design Elements* across the specified age groups.

Age: ALP

Table 43 shows the perceptions of EFL instructors related to constructs of *Adult Learning Principles- Self-directedness, Need to know, Readiness, Prior experience, and Motivation* in three age groups-26-40;41-49; and 50⁺.

Table 43

Adult Learning Principles (ALP): Age (N = 137)

Constructs		26-40 (n=46)	41-49 (n=59)	50 ⁺ (n=32)
Self-directedness				
	<i>M</i>	3.92	3.80	3.85
	<i>SD</i>	0.68	0.84	0.66
Need to Know				
	<i>M</i>	4.15	4.00	4.08
	<i>SD</i>	0.52	0.74	0.53
Readiness				
	<i>M</i>	3.73	3.54	3.65
	<i>SD</i>	0.63	0.85	0.62
Prior Experience				
	<i>M</i>	4.01	3.99	4.01
	<i>SD</i>	0.62	0.79	0.76
Motivation				
	<i>M</i>	3.91	3.68	3.76
	<i>SD</i>	0.67	0.85	0.65

Table 43 demonstrates that the 26-40 age group tended to have higher means across all constructs, indicating a relatively stronger agreement. The 41-49 age group, on the other hand, consistently exhibited lower means and higher variability. Specifically, the consideration given to EFL instructors' *Need to know* in the PDAs had the highest mean across the three age groups 26-40 ($M=4.15$, $SD=0.52$), 41-49 ($M=4$, $SD=0.74$), and 50⁺ ($M=4.08$, $SD=0.53$). This was followed by *Prior experience* with a mean of around 4 and a standard deviation of around 0.7 across the age groups. As for the other subconstructs- *Self-directedness, Readiness, and*

Motivation- responses given by EFL instructors across all the groups leaned towards agreement with a mean over 3.5.

To investigate if EFL instructors' perceptions of the PDAs within the *Adult Learning Principles* differ by age, the Kruskal-Wallis was conducted (Table 44).

Table 44

Kruskal-Wallis Rank Score Test for the Comparison of EFL Instructors' Perceptions of ALPs Based on Age

Constructs	Mean Rank of Age			χ^2	df	p
	26-40 (n=46)	41-49 (n=59)	50+ (n=32)			
Self-directedness	72.71	67.15	67.08	0.623	2	.732
Need to Know	72.01	67.49	67.45	0.418	2	.811
Readiness	73.52	65.82	68.36	1.020	2	.600
Prior Experience	67.38	67.67	70.09	0.131	2	.937
Motivation	75.65	65.96	65.05	2.022	2	.364

The Kruskal-Wallis test results indicated that there were no significant differences across the specified age groups for the respective constructs (Table 44).

Age: APDE

Table 45 shows the descriptive statistics as to perceptions of EFL instructors related to constructs of *Process Design Elements- Preparing the learner, Climate setting, Setting objectives, Designing learning experiences, Learning activities, and Evaluation of learning-*, in three age groups 26-40, 41-49 and 50⁺.

Table 45

Adult Process Design Elements (APDE): Age (N = 137)

Constructs	26-40 (n=46)	41-49 (n=59)	50 ⁺ (n=32)
Preparing the Learner			
<i>M</i>	3.52	3.41	3.55
<i>SD</i>	0.67	0.81	0.69

Constructs		26-40 (n=46)	41-49 (n=59)	50 ⁺ (n=32)
Climate Setting				
	<i>M</i>	3.51	3.65	3.71
	<i>SD</i>	0.76	0.76	0.63
Setting Objectives				
	<i>M</i>	3.44	3.55	3.48
	<i>SD</i>	0.74	0.79	0.76
Design Learning Experiences				
	<i>M</i>	3.39	3.24	3.29
	<i>SD</i>	0.87	0.88	0.84
Learning Activities				
	<i>M</i>	2.84	2.75	2.81
	<i>SD</i>	0.86	0.72	0.82
Evaluation of Learning				
	<i>M</i>	3.14	3.20	3.27
	<i>SD</i>	0.80	0.82	0.78

As evidenced in Table 45, the 50⁺ group had the highest means for *Preparing the learner*, *Climate setting*, and *Evaluation of learning*. The 26-40 age group had the highest means for *Setting objectives*, *Designing learning experience*, and *Learning activities*. The 41-49 group generally exhibited higher standard deviations, indicating more variability in the perceptions within this age group.

Climate setting had the highest overall mean score of 3.62, indicating general agreement across all age groups. Conversely, *Learning activities* exhibited the lowest average score of 2.80 across age groups, with the 41-49 age group displaying the lowest variability, while the 20-40 showing the highest.

As indicated in Table 45, EFL instructors across the three age groups demonstrated agreement with the constructs *Preparing the learner*, *Climate setting*, and *Setting objectives* with a mean above 3.45 and a standard deviation ranging from 0.63 to 0.76 for the age groups 26-40 and 50⁺. However, the 41-49 age group indicated higher variability in their responses. Conversely, as for *Designing Learning experiences*, instructors aged 26-40 (*M*=3.39), 41-49 (*M*=3.24), and 50⁺ (*M*=3.29) remained neutral with the way learning experiences were designed in the PDAs. The

responses given for this construct exhibited moderate variations as evidenced by a standard deviation ranging from 0.84 to 0.88. The items in *Learning activities* were reversed and examined whether EFL instructors felt passive during these activities. EFL instructors aged 26-40 ($M=2.84$, $SD=0.86$), 41-49 ($M=2.75$ $SD=0.72$), and instructors over 50⁺ ($M=2.81$, $SD=0.82$), had a neutral stance on the way learning activities were designed. Finally, EFL instructors aged 26-40 remained neutral with the *Evaluation of learning* with 3.14 ($SD=0.80$) while instructors aged 41-49 and 50⁺ had a slightly higher mean for this construct ($M=3.20$, $SD=0.82$; $M=3.27$, $SD=0.78$).

To examine if instructors' perceptions of the *Preparing the learner*, *Designing learning experiences*, *Learning activities*, and *Evaluation of learning* differ by their age, the Kruskal-Wallis was conducted (Table 46). As for *Climate setting* and *Setting objectives*, one-way ANOVA was conducted (Table 47).

Table 46

Kruskal-Wallis Rank Score Test for the Comparison of EFL Instructors' Perceptions of APDEs Based on Age

Constructs	<u>Mean Rank of Age</u>			χ^2	df	p
	26-40 ($n=46$)	41-49 ($n=59$)	50+ ($n=32$)			
Preparing the Learner	70.91	66.83	70.25	0.324	2	.850
Designing Learning Experiences	72.84	67.36	66.50	0.687	2	.709
Learning Activities	69.30	68.19	70.05	0.051	2	.975
Evaluation of Learning	65.95	69.21	73.00	0.638	2	.727

The Kruskal-Wallis test results indicated that there were no significant differences across the specified age groups for the respective constructs (Table 46).

Table 47 shows how EFL instructors in three age groups (26- 40, 41-49, and 50⁺) perceive the way climate and objectives are set in the PDAs provided.

Table 47

The Results of One-way ANOVA for the perceptions of EFL instructors Related to Setting Climate and Setting Objectives Based on Age

Constructs	26-40		41-49		50 ⁺		<i>F</i> (2,13)
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Climate Setting	3.51	0.76	3.65	0.76	3.71	0.63	.779
Setting Objectives	3.44	0.74	3.55	0.79	3.48	0.76	.293

The results of the one-way ANOVA test (Table 47) showed no statistically significant difference in EFL instructors' perceptions of *Climate setting* and *Setting objectives* across different age groups.

Years of Experience in ELT

ALP & APDE

Table 48 displays the means (*M*) and standard deviations (*S*) for *Adult Learning Principles* and *Process Design Elements* categorized by years of experience in ELT. The study had EFL instructors with 0-15, 16-24, and 25⁺ years of experience in ELT.

Table 48

ALP and APDE: Years of Experience in ELT (N = 137)

Framework		0-15 (<i>n</i> =27)	16-24 (<i>n</i> =71)	25 ⁺ (<i>n</i> =39)
Adult Learning Principles	<i>M</i>	4.07	3.73	3.97
	<i>SD</i>	0.35	0.70	0.50
Process Design Elements	<i>M</i>	3.51	3.31	3.55
	<i>SD</i>	0.73	0.66	0.70

As evidenced in Table 48, EFL instructors with different years of experience in ELT demonstrated a general agreement with *Adult Learning Principles*.

Instructors with experience of 0-15 years in ELT had the highest mean of 4.07 ($SD=0.35$), with the lowest variability, indicating more consistent perspectives among them. This group was followed by instructors with experience over 25⁺ ($M=3.97$, $SD= 0.50$). Finally, instructors with experience of 16-24 years in ELT had the lowest mean, with the highest variability, suggesting a diverse range of opinions about the *Adult Learning Principles* in the PDAs ($M=3.73$, $SD=0.70$).

Concerning the consideration given to *Process Design Elements* in the provided PDAs, EFL instructors displayed lower agreement. While the 25⁺ years of experience group attained the highest mean of 3.55, emphasizing a relatively stronger level of agreement, the 16-24 years of experience group exhibited the lowest mean, with a more homogenous perspective. The least experienced EFL instructors had an agreement with a mean of around 3.51 and an SD of 0.73.

To examine potential differences in EFL instructors' perceptions of ALP and APDE based on their years of experience in ELT, the Kruskal-Wallis test was conducted and the findings were presented in Table 49.

Table 49

Kruskal-Wallis Rank Score Test for the Comparison of EFL Instructors' Perceptions of ALPs and APDE Based on Years of Experience in ELT

Framework	<u>Mean Rank of Years of Experience</u>			χ^2	df	p
	0-15 (n=27)	16-24 (n=71)	25 ⁺ (n=39)			
Adult Learning Principles	82.61	61.75	72.78	5.904	2	.052
Process Design Elements	75.83	63.25	74.74	3.110	2	.211

According to the Kruskal-Wallis test results as shown in Table 49, there were no statistically significant differences in EFL instructors' perceptions based on their years of experience in ELT for any of the constructs.

Years of Experience in ELT: ALP

Table 50 presents the descriptive analysis of the responses given by EFL instructors related to constructs of *Adult Learning Principles- Self-directedness, Need to know, Readiness, Prior experience, and Motivation* based on their years of experience in ELT.

Table 50

Adult Learning Principles (ALP): Years of Experience in ELT (N = 137)

Constructs		0-15 (n=27)	16-24 (n=71)	25+ (n=39)
Self-directedness	<i>M</i>	3.96	3.73	4.00
	<i>SD</i>	0.60	0.86	0.57
Need to Know	<i>M</i>	4.20	3.97	4.16
	<i>SD</i>	0.44	0.73	0.50
Readiness	<i>M</i>	3.90	3.49	3.70
	<i>SD</i>	0.56	0.79	0.67
Prior Experience	<i>M</i>	4.22	3.83	4.16
	<i>SD</i>	0.52	0.78	0.68
Motivation	<i>M</i>	4.06	3.63	3.84
	<i>SD</i>	0.53	0.85	0.62

As shown in Table 50, instructors with 0-15 years of experience consistently expressed the highest level of agreement across the constructs, as indicated by the highest mean scores ranging from 3.90 to 4.22 with a lower standard deviation. In contrast, instructors with 16-24 years of experience demonstrated the lowest level of agreement with these principles with a mean from 3.49 to 3.97 with a higher standard deviation reflecting a more varied range of perspectives.

To examine if EFL instructors' perceptions of the PDAs offered to them within the framework of adult learning differ by years of experience, the Kruskal-Wallis was conducted and reported in Table 51.

Table 51

Kruskal-Wallis Rank Score Test for the Comparison of EFL Instructors' Perceptions of ALPs Based on Years of Experience in ELT

Constructs	<u>Mean Rank of Experience in ELT</u>			χ^2	df	p
	0-15 (n=27)	16-24 (n=71)	25 ⁺ (n=39)			
Self-directedness	72.74	64.34	74.90	2.146	2	.342
Need to Know	75.41	64.68	72.42	1.923	2	.382
Readiness	82.70	63.04	70.37	5.050	2	.080
Prior Experience	77.96	61.53	76.40	5.844	2	.054
Motivation	82.78	64.45	67.74	4.368	2	.113

As evidenced in Table 51, the Kruskal-Wallis test results indicated statistically no significant difference in the perceptions of EFL instructors with 0-15, 16-24, and 25⁺ years of experience for any of the constructs within *the Adult Learning Principles*.

Years of Experience in ELT: APDE

Table 52 displays the descriptive statistics as to EFL instructors' perceptions related to constructs of *Process Design Elements- Preparing the learner, Climate setting, Setting objectives, Designing learning experiences, Learning activities, and Evaluation of learning-* based on their years of experience in ELT.

As shown in Table 52, the 0-15 years group demonstrated a comparatively higher level of agreement with *Process Design Elements* with an emphasis on the construct of *Preparing the learner* standing out with the highest mean score of 3.67

within this group. Conversely, the age group 25⁺ expressed higher agreement with *Climate setting*, *Setting objectives*, and *Evaluation of learning*. Finally, instructors with 16-24 years of experience displayed the lowest mean for all the constructs with moderate variations, indicating diverse perceptions within this group.

Table 52

Adult Process Design Elements (APDE): Years of Experience in ELT (N = 137)

Constructs		0-15 (n=27)	16-24 (n=71)	25 ⁺ (n=39)
Preparing the Learner				
	<i>M</i>	3.67	3.33	3.61
	<i>SD</i>	0.61	0.75	0.73
Climate Setting				
	<i>M</i>	3.57	3.55	3.76
	<i>SD</i>	0.86	0.71	0.67
Setting Objectives				
	<i>M</i>	3.51	3.44	3.61
	<i>SD</i>	0.81	0.73	0.79
Design Learning Experiences				
	<i>M</i>	3.53	3.15	3.42
	<i>SD</i>	0.94	0.80	0.89
Learning Activities				
	<i>M</i>	2.72	2.79	2.85
	<i>SD</i>	0.77	0.83	0.72
Evaluation of Learning				
	<i>M</i>	3.28	3.06	3.38
	<i>SD</i>	0.82	0.80	0.76

Specifically, EFL instructors with 0-15, 16-24, and 25⁺ agreed with the *Climate setting* with a mean of 3.57 (*SD*=0.86), 3.55 (*SD*=0.71) and 3.76 (*SD*=0.67) respectively. This is followed by the way they were prepared for the learning experiences with a mean of 3.67 for instructors with 0-15 years and 3.61 for the ones with 25⁺ of experience. However, instructors with 16-24 years of experience remained neutral in *Preparing the learner* (*M*=3.33, *SD*= 0.75). Concerning *Setting objectives*, instructors leaned towards an agreement with a mean of around 3.5. As

for *Designing learning experiences*, instructors with 0-15 and 25⁺ years of experience agreed with the items ($M=3.53$, $SD=0.94$) and ($M=3.42$, $SD=0.89$) respectively while instructors with 16-24 years of experience remained neutral with the items in this construct ($M=3.15$, $SD=0.80$). All the items in *Learning activities* were reversed and surveyed if EFL instructors felt passive during these activities. EFL instructors with experience of 0-15 ($M=2.72$, $SD=0.77$), 16-24 ($M=2.79$, $SD=0.83$), and instructors over 25⁺ ($M=2.85$, $SD=0.72$) years of experience had a neutral stance on the way learning activities were designed. As for the *Evaluation of learning*, novice and senior instructors remained neutral with a mean of 3.28, and 3.38 respectively. Finally, instructors with 16-24 years of experience had a neutral stance on the way their learning was evaluated with a mean of 3.06. The standard deviation did not differ greatly across the groups in this construct.

To examine if EFL instructors' perceptions related to *Process Design Elements- Preparing the learner, Climate setting, Setting objectives, Designing learning experiences, Learning activities*, and *Evaluation of learning* differ based on years of experience in ELT, the Kruskal-Wallis was utilized (Table 53). As for *Climate setting* and *Setting objectives*, One-way ANOVA was employed and presented in Table 53.

Table 53

Kruskal-Wallis Rank Score Test for the Comparison of EFL Instructors' Perceptions of APDEs Based on Years of Experience in ELT

Constructs	Mean Rank of Age			χ^2	df	p
	0-15 (n=27)	16-24 (n=71)	25 ⁺ (n=39)			
Preparing the Learner	80.20	62.15	73.71	4.954	2	.084
Designing Learning Experiences	80.81	62.23	73.14	5.105	2	.078
Learning Activities	63.72	68.80	73.01	0.915	2	.633
Evaluation of Learning	73.26	62.52	77.85	4.412	2	.110

As evidenced in Table 53, no statistically significant difference was observed in EFL instructors' perceptions based on their years of experience concerning the respective constructs ($p > 0.05$).

One-way ANOVA was conducted, as reported in Table 54, to compare EFL instructors' perceptions of how the climate and objectives are set in the PDAs based on their years of experience in ELT.

Table 54

The Results of the One-Way ANOVA for the Perceptions of EFL Instructors Related to Climate Setting and Setting Objectives Based on Experience in ELT

Constructs	0-15		16-24		25 ⁺		<i>F</i> (2,13)
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Climate Setting	3.57	0.86	3.55	0.71	3.76	0.67	1.047
Setting Objectives	3.51	0.81	3.44	0.73	3.61	0.79	.613

The results of the one-way ANOVA test showed no statistically significant difference in EFL instructors' perceptions of *Climate setting and Setting Objectives* based on experience in HE as demonstrated in Table 54.

Years of Experience in HE

ALP & APDE

Table 55 shows a descriptive analysis of EFL instructors' perceptions of *the Adult Learning Principles* and *Process Design Elements* categorized by years of experience in HE (0-15, 16-24, 25⁺).

As shown in Table 55, despite subtle variations, there is a consensus among EFL instructors with different years of experience in HE concerning *Adult Learning Principles*. While instructors with experience of 0-15 years and the ones above 25⁺ years of experience in HE had a relatively higher mean of 3.97 and 4.07 respectively,

instructors with 16-24 years of experience in HE had a lower mean of 3.74 with higher variability in their responses.

Table 55

ALP and APDE: Years of Experience in HE (N = 137)

Framework		0-15 (n=40)	16-24 (n=73)	25 ⁺ (n=24)
Adult Learning Principles	<i>M</i>	3.97	3.74	4.07
	<i>SD</i>	0.51	0.66	0.50
Process Design Elements	<i>M</i>	3.48	3.31	3.64
	<i>SD</i>	0.71	0.68	0.62

A similar trend was observed in the responses to *Process Design Elements* with slightly higher variations among instructors with 0-15 years of experience ($M=3.48$, $SD=0.71$) and 25⁺ years of experience ($M=3.64$, $SD=0.62$). However, instructors with experience of 16-24 years in HE exhibited a lower agreement with the *Process Design Elements* ($M=3.31$, $SD=0.68$).

To investigate the potential difference in EFL instructors' perceptions of *ALP* and *APDE* depending on their years of experience in HE, the Kruskal-Wallis test was conducted (Table 56).

Table 56

Kruskal-Wallis Rank Score Test for the Comparison of EFL Instructors' Perceptions of ALPs and APDE Based on Years of Experience in HE

Framework	Mean Rank of Years of Experience in HE			χ^2	<i>df</i>	<i>p</i>
	0-15 (n=40)	16-24 (n=73)	25 ⁺ (n=24)			
Adult Learning Principles	76.86	61.67	78.19	5.348	2	.069
Process Design Elements	72.93	63.39	79.52	3.537	2	.171

As evidenced in Table 56, no statistically significant difference was found in EFL instructors' perceptions of *ALP* and *APDE* based on their years of experience in HE.

Years of Experience in HE: ALP

Table 57 shows the mean (M) and standard deviations (S) for *Self-directedness*, *Need to know*, *Readiness*, *Prior experience*, and *Motivation* within the *Adult Learning Principles*- categorized by EFL instructors' years of experience in HE.

Table 57

Adult Learning Principles (ALP): Years of Experience in HE (N = 137)

Constructs		0-15 (n=40)	16-24 (n=73)	25 ⁺ (n=24)
Self-directedness	<i>M</i>	3.90	3.73	4.15
	<i>SD</i>	0.71	0.80	0.52
Need to Know	<i>M</i>	4.16	3.99	4.16
	<i>SD</i>	0.56	0.68	0.55
Readiness	<i>M</i>	3.76	3.50	3.80
	<i>SD</i>	0.64	0.77	0.68
Prior Experience	<i>M</i>	4.10	3.86	4.27
	<i>SD</i>	0.67	0.78	0.53
Motivation	<i>M</i>	3.91	3.64	3.95
	<i>SD</i>	0.70	0.80	0.62

As shown in Table 57, EFL instructors with different years of experience in HE agreed with the consideration given to the *Adult Learning Principles* with a mean of over 3.5 across all the groups. Instructors with 25⁺ years of experience in HE demonstrated the highest agreement with the lowest variability in their responses with *Self-directedness* ($M=4.15$, $SD=0.52$), *Need to know* ($M= 4.16$, $SD=0.55$),

Readiness ($M=3.80$, $SD=0.68$), *Prior experience* ($M=4.27$, $SD=0.53$) and *Motivation* ($M=3.95$, $SD=0.62$). This is followed by instructors with 0-15 years of experience in HE, who expressed their agreement with these constructs with a slightly lower mean with a relatively higher variation in their responses. Finally, instructors with 16-24 years of experience exhibited the lowest agreement with the constructs *Self-directedness* ($M=3.73$, $SD=0.80$), *Need to know* ($M= 3.99$, $SD=0.68$.), *Readiness* ($M=3.50$, $SD=0.77$), *Prior experience* ($M=3.86$, $SD=0.78$) and *Motivation* ($M=3.64$, $SD=0.80$) with the highest variations in their responses

As shown in Table 58, the Kruskal -Wallis test was employed to examine potential differences in EFL instructors' perceptions of *Adult Learning Principles* based on years of experience in HE.

Table 58

Kruskal-Wallis Rank Score Test for the Comparison of EFL Instructors' Perceptions of PDAs Based on Experience in HE

Constructs	Mean Rank of Experience in HE			χ^2	df	p
	0-15 ($n=40$)	16-24 ($n=73$)	25+ ($n=24$)			
Self-Directedness	72.24	62.64	82.94	5.260	2	.072
Need to Know	73.53	65.47	72.21	1.317	2	.518
Readiness	76.08	62.71	76.35	4.077	2	.130
Prior Experience	73.28	62.89	80.46	4.671	2	.097
Motivation	77.24	63.24	72.79	3.597	2	.166

According to the results presented in Table 58, statistically no significant difference was observed in instructors' perceptions of the PDAs based on *Adult Learning Principles- Self-directedness, Need to know, Readiness, Prior experience and Motivation-* among those with 0-15 years; 16-24 years, and 25+ years of experience in HE.

Years of Experience in HE: APDE

Table 59 reveals the means (M) and standard deviations (S) for constructs of *Process Design Elements- Preparing the learner, Climate setting, Setting objectives, Designing learning experiences, Learning activities, and Evaluation of learning of learning-* based on EFL instructors' years of experience in HE.

Table 59

Adult Process Design Elements (APDE): Years of Experience in HE (N = 137)

Constructs		0-15 (n=40)	16-24 (n=73)	25 ⁺ (n=24)
Preparing the Learner				
	<i>M</i>	3.55	3.39	3.62
	<i>SD</i>	0.66	0.73	0.83
Climate Setting				
	<i>M</i>	3.62	3.54	3.82
	<i>SD</i>	0.84	0.69	0.68
Setting Objectives				
	<i>M</i>	3.52	3.42	3.70
	<i>SD</i>	0.80	0.75	0.74
Design Learning Experiences				
	<i>M</i>	3.46	3.14	3.54
	<i>SD</i>	0.90	0.86	0.75
Learning Activities				
	<i>M</i>	2.78	2.77	2.89
	<i>SD</i>	0.81	0.82	0.62
Evaluation of Learning				
	<i>M</i>	3.24	3.07	3.50
	<i>SD</i>	0.78	0.84	0.62

As shown in Table 59, EFL instructors with 0-15 and 25⁺ years of experience in HE demonstrated a higher agreement with the constructs in *Process and Design Elements* with a mean of above 3.5 compared to the ones with 16-24 years of experience in HE with moderate variations in their responses. Instructors with this year of experience in HE had a lower mean for *Preparing the learner* ($M= 3.39$, $SD=0.73$), *Climate setting* ($M= 3.54$, $SD=0.69$), *Setting objectives* ($M= 3.42$, $SD=0.$

68), *Designing learning experiences* ($M= 3.14$, $SD=0.86$), *Learning activities*- in which the items were reversed- ($M= 2.77$, $SD=0.82$), and *the Evaluation of learning* ($M= 3.07$, $SD=0.84$). EFL instructors across the groups demonstrated the lowest agreement with the way *Learning activities* were conducted and the *Evaluation of learning*. EFL instructors remained neutral as to their active role in learning activities with moderate variations in their answers. Finally, as for *the Evaluation of learning* EFL instructors held a neutral stance, exhibiting a higher variation in their responses, unlike instructors with over 25⁺ years of experience in HE, who had the highest mean ($M= 3.50$, $SD=0.62$) with less variability in their responses.

To examine if EFL instructors' perceptions of *Process Design Elements* differ based on their years of experience in HE, the Kruskal-Wallis test was used (Table 60). As for *Setting objectives* one-way ANOVA was used to this end and reported in Table 61.

Table 60

Kruskal-Wallis Rank Score Test for the Comparison of EFL Instructors' Perceptions of APDEs Based on Experience in HE

Constructs	<u>Mean Rank of</u> <u>Experience in HE</u>			χ^2	df	p
	0-15 ($n=40$)	16-24 ($n=73$)	25+ ($n=24$)			
Preparing the Learner	73.23	64.47	75.75	2.163	2	.339
Climate Setting	71.19	65.01	77.48	1.969	2	.374
Designing Learning Experiences	76.03	62.14	78.17	4.932	2	.085
Learning Activities	68.05	67.49	75.17	0.737	2	.692
Evaluation of Learning	71.21	63.55	81.90	4.300	2	.116

According to the findings demonstrated in Table 60, there was statistically no significant difference in EFL instructors' perceptions of the PDAs among those with 0-15 years; 16-24 years, and 25⁺ years of experience in HE.

Table 61 shows the perception of EFL instructors with different years of experience in HE for *Setting objectives*.

Table 61

The Results of One-Way ANOVA Regarding the Perceptions of EFL Instructors Related to Setting Objectives Based on Experience in HE

Construct	0-15		16-24		25 ⁺		<i>F</i> (2,13)
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Setting Objectives	3.52	0.80	3.42	0.75	3.70	0.74	1.256

As shown in the results of the one-way ANOVA test (Table 61), there was statistically no significant difference in EFL instructors' perceptions of *Process Design Elements* among EFL instructors with different years of experience in HE. The results for setting objectives were ($F_{2,13}= 1.256$, $p=>0.05$, $\eta^2=0.18$).

Bachelor's Degree

ALP & APDE

Table 62 displays the descriptive analysis of *Adult Learning Principles* and *Process Design Elements* by bachelor's degree. The study included 49 EFL instructors with a Bachelor's Degree in TEFL and 88 EFL instructors with a Bachelor's Degree in other English language-related departments.

As shown in Table 62, EFL instructors with a Bachelor's Degree in TEFL ($M= 3.91$, $SD=0.60$) and in other English-related departments ($M= 3.84$, $SD=0.61$) had a general agreement with *Adult Learning Principles*, with subtle variations in their responses which indicates a greater consensus.

Table 62*ALP and APDE: Bachelor's Degree (N = 137)*

Framework	Teaching English as Foreign Language (n=49)	English Language (n=88)
Adult Learning Principles		
<i>M</i>	3.91	3.84
<i>SD</i>	0.60	0.61
Process Design Elements		
<i>M</i>	3.43	3.41
<i>SD</i>	0.77	0.65

However, EFL instructors in both groups had a neutral stance on *the Process Design Elements* with a mean of 3.43 and 3.41 respectively ($SD=.77$, $SD=0.65$).

The Mann-Whitney U test was employed to examine potential variations in EFL instructors' perceptions related to *Adult Learning Principles and Process Design Elements* based on their field of Bachelor's Degree (Table 63).

Table 63

Mann-Whitney U Test for the Comparison of EFL Instructors' Perceptions of ALPs and APDE Bachelor's Degree

Framework	<u>Mean Rank of Bachelor's Degree</u>		<u>Sum of Ranks</u>		<i>U</i>	<i>z</i>	<i>p</i>
	Teaching English as a Foreign Language (n=49)	English Langua ge (n=88)	Teaching English as a Foreign Language (n=49)	English Langua ge (n=88)			
Adult Learning Principles	70.87	67.96	3472.50	5980.50	2064.50	-.411	.681
Process Design Elements	68.73	69.15	3368.00	6085.00	2143.00	-.058	.953

The test results show that there were no statistically significant differences in EFL instructors' perceptions based on their field of Bachelor's Degree for any of the constructs as demonstrated in Table 63.

Bachelor's Degree: ALP

Table 64 demonstrates the descriptive analysis as to EFL instructors' perceptions in relation to constructs of adult learning- *Self-directedness*, *Need to know*, *Readiness*, *Prior experience*, and *Motivation* by Bachelor's Degree

Table 64

Adult Learning Principles (ALP): Bachelor's Degree (N = 137)

Constructs		Teaching English as a Foreign Language (n=49)	English Language (n=88)
Self-directedness			
	<i>M</i>	3.95	3.79
	<i>SD</i>	0.73	0.75
Need to Know			
	<i>M</i>	4.21	3.99
	<i>SD</i>	0.57	0.64
Readiness			
	<i>M</i>	3.61	3.64
	<i>SD</i>	0.64	0.78
Prior Experience			
	<i>M</i>	3.93	4.03
	<i>SD</i>	0.80	0.68
Motivation			
	<i>M</i>	3.83	3.75
	<i>SD</i>	0.75	0.75

As reported in Table 64, EFL instructors with a Bachelor's Degree in TEFL expressed a higher agreement with *Self-directedness* ($M= 3.95$, $SD=0.73$), *Need to know* ($M= 4.21$, $SD=0.57$), and *Motivation* ($M= 3.83$, $SD=0.75$) with subtle variations in their responses. On the other hand, EFL instructors with a Bachelor's Degree in other related English departments exhibited a lower agreement for *Self-*

directedness ($M= 3.79$, $SD=0.75$), *Need to know* ($M= 3.99$, $SD=.064$), and *Motivation* ($M= 3.75$, $SD=.075$) with higher variations, suggesting a relatively diverse range of opinions within this group. As for the consideration given to *Readiness*, EFL instructors with a Bachelor's Degree in other English-related departments exhibited a higher means with subtle variations in their responses ($M= 3.61$, $SD=0.64$) Finally, for *Prior experience*, EFL instructors with a Bachelor's Degree in other English related departments also demonstrated higher means ($M= 3.93$, $SD=0.80$) compared to the TEFL graduates despite higher variations in their responses.

To investigate if EFL instructors' perceptions of *Process Design Elements* vary based on their Bachelor's Degree, the Mann-Whitney U test was used (Table 65).

Table 65

Mann-Whitney U Test for the Comparison of EFL Instructors' Perceptions of ALPs Based on Bachelor's Degree

Constructs	<u>Mean Rank of</u> <u>Bachelor's Degrees</u>		<u>Sum of</u> <u>Ranks</u>		<i>U</i>	<i>z</i>	<i>p</i>
	Teaching English as a Foreign Language ($n=49$)	English Language ($n=88$)	Teaching English as a Foreign Language ($n=49$)	English Language ($n=88$)			
Self-directedness	73.96	66.24	3624.00	5829.00	1913	-1.108	.268
Need to Know	77.28	64.39	3786.50	5666.50	1750.50	-1.865	.062
Readiness	65.64	70.87	3216.50	6236.50	1991.50	-.752	.452
Prior Experience	65.85	70.76	3226.50	6226.50	2001.50	-.732	.464
Motivation	70.96	67.91	3477.00	5976.00	2060	-.438	.661

As shown in Table 65, there was statistically no difference in the perceptions of EFL instructors with Bachelor's Degree in TEFL compared to those in other English-related departments within the framework of *Adult Learning Principles*.

Bachelor's Degree: APDE

Table 66 demonstrates the means (M) and standard deviations (S) for *Adult Process Design Elements* in the PDAs based on their Bachelor's Degree

Table 66

Adult Process Design Elements (APDE): Bachelor's Degree (N = 137)

Constructs	Teaching English as Foreign Language (n=49)	English Language (n=88)
Preparing the Learner		
<i>M</i>	3.39	3.53
<i>SD</i>	0.84	0.66
Climate Setting		
<i>M</i>	3.60	3.62
<i>SD</i>	0.84	0.68
Setting Objectives		
<i>M</i>	3.53	3.48
<i>SD</i>	0.84	0.72
Designing Learning Experiences		
<i>M</i>	3.36	3.27
<i>SD</i>	0.99	0.79
Learning Activities		
<i>M</i>	2.87	2.75
<i>SD</i>	0.85	0.75
Evaluation of Learning		
<i>M</i>	3.25	3.16
<i>SD</i>	0.85	0.77

Overall, the responses by TEFL graduates exhibited moderate variability across all the constructs while, EFL instructors with Bachelor's Degree in other English-related departments demonstrated less variability as demonstrated in Table 66.

Specifically, EFL instructors with both a Bachelor's Degree in TEFL and in other related English departments demonstrated the highest agreement with the *Climate setting* ($M= 3.60$, $SD= 0.84$) and ($M= 3.62$, $SD= 0.68$), demonstrating higher and lower variations respectively. This is followed by *Setting objectives* for TEFL graduates ($M= 3.53$, $SD= 0.84$) and the graduates of other English related departments ($M= 3.48$, $SD=0.72$). As for *Preparing the learner*, EFL instructors with a Bachelor's Degree in TEFL had a neutral stance with a mean of 3.36 while the EFL instructors with other English related departments expressed their agreement with a mean of 3.53. Both groups of EFL instructors remained neutral with *Designing learning experiences*, *Learning activities*- in which the items were reversed- and *the Evaluation of learning*.

To examine potential differences in instructors' perceptions related to *Process Design Elements* (*Preparing the learner*, *Climate setting*, *Designing learning experiences*, *Learning activities*, and *Evaluation of learning*) by Bachelor's Degree, the Mann-Whitney U test was used (Table 67). As for the *Setting objectives*, an independent t-test (Table 68) was used to investigate if instructors' perceptions differ based on their Bachelor's Degree.

Table 67 demonstrates if EFL instructors' perceptions of the PDAs offered to them within the *Process and Design Elements* differ based on the field of Bachelor's Degree. As evidenced in the table, there was statistically no difference between the perceptions of the TEFL graduates and graduates of other English-related departments of the PDAs offered to them within *Process Design Elements* for any of the specified constructs.

Table 67

Mann-Whitney U Test for the Comparison of EFL Instructors' Perceptions of APDEs by Bachelor's Degree

Constructs	<u>Mean Rank of Bachelor's Degree</u>		<u>Sum of Ranks</u>		<i>U</i>	<i>z</i>	<i>p</i>
	Teaching English as a Foreign Language (n=49)	English Language (n=88)	Teaching English as a Foreign Language (n=49)	English Language (n=88)			
Preparing the Learner	64.96	71.25	3183.00	6270.00	1958	-.902	.367
Climate Setting	70.55	68.14	3457.00	5996.00	2080	-.343	.732
Designing Learning Experiences	71.73	67.48	3515.00	5938.00	2022	-.615	.538
Learning Activities	71.88	67.40	3522.00	5931.00	2015	-.646	.518
Evaluation of Learning	72.46	67.07	3550.50	5902.50	1986	-.786	.432

To examine if the perceptions of EFL instructors related to *Setting objectives* vary based on their Bachelor's Degree, an independent t-test was employed and reported in Table 68.

Table 68

The Results of Independent T-test for Setting Objectives Based on Bachelor's Degree

Construct	<i>TEFL</i>		<i>English Language</i>		<i>t</i> (135)	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Setting Objectives	3.53	0.84	3.48	0.72	.305	.76

As seen in Table 68, no statistical difference was observed between the perceptions of EFL instructors with a BA in TEFL ($M=3.53$, $SD=0.84$) and those

from a BA in other English-related departments ($M=3.48$, $SD=0.72$) regarding *Setting objectives* in the PDAs offered to them in their institutions ($t(135) = .305$, $p = .76$).

Master's Degree

ALP & APDE

Table 69 presents the descriptive analysis of EFL instructors' perceptions of the *Adult Learning Principles* and *Process Design Elements* based on their degree of MA. The study included 21 EFL instructors with a Master's Degree in TEFL, 28 in other English-related departments, 33 in other fields and 51 EFL instructors without a Master's Degree.

Table 69

ALP and APDE: Master's Degree (N = 137)

Framework		TEFL (n=25)	Eng_ Language (n=28)	Other (n=33)	None (n=51)
Adult Learning Principles	<i>M</i>	3.96	4.01	3.71	3.84
	<i>SD</i>	0.69	0.59	0.72	0.46
Process Design Elements	<i>M</i>	3.52	3.56	3.16	3.46
	<i>SD</i>	0.72	0.77	0.72	0.57

As shown in Table 69, there is a high level of agreement on *Adult Learning Principles* among EFL instructors with different Master's Degree qualifications. Specifically, instructors with a Master's in the field expressed their agreement on *Adult Learning Principles* with a mean of 3.96 and 4.01 respectively with subtle variability in their responses. However, EFL instructors with a Master's Degree in other fields displayed lower means and higher variability in their responses ($M=3.71$, $SD=0.72$). Finally, instructors without a Master's Degree expressed their agreement

with *Adult Learning Principles* with a mean of 3.84 ($SD=0.46$) with a subtle variability, indicating a common consensus within the group.

As for *Process Design Elements*, EFL instructors with a Master's Degree in other fields remained neutral with moderate variations in their responses ($M=3.16$, $SD=0.72$) whereas all the other EFL instructors agreed with this construct with a mean of around 3.5. exhibiting moderate variability in their responses except for EFL instructors without a Master's Degree ($SD=0.57$).

To examine potential differences in EFL instructors' perceptions of ALP and APDE based on their Master's Degree qualifications, the Kruskal-Wallis test was conducted (Table 70).

Table 70

Kruskal-Wallis Rank Score Test for the Comparison of EFL Instructors' Perceptions of ALPs and APDEs Based on Master's Degree

Framework	Mean Rank of Master's Degree				χ^2	df	p
	TEFL (n=25)	English Language (n=28)	Other (n=33)	None (n=51)			
Adult Learning Principles	75.00	82.04	59.89	64.79	5.905	3	.116
Process Design Elements	72.74	79.29	56.33	69.72	5.482	3	.140

The test results indicate no statistically significant differences in EFL instructors' perceptions based on their Master's Degree qualifications for any of the constructs (Table 70).

Master's Degree: ALP

Table 71 shows the descriptive analysis of EFL instructors' perceptions of the subconstructs of *Adult Learning Principles – Self-directedness, Need to know,*

Readiness, Prior experience, and Motivation- based on their Master's Degree qualifications.

Table 71

Adult Learning Principles (ALP): Master's Degree (N = 137)

Constructs		TEFL (n=25)	Eng_ Language (n=28)	Other (n=33)	None (n=51)
Self-directedness					
	<i>M</i>	3.96	4.01	3.67	3.83
	<i>SD</i>	0.74	0.73	0.91	0.63
Need to Know					
	<i>M</i>	4.17	4.15	3.97	4.04
	<i>SD</i>	0.65	0.61	0.77	0.52
Readiness					
	<i>M</i>	3.72	3.91	3.37	3.60
	<i>SD</i>	0.77	0.79	0.73	0.62
Prior Experience					
	<i>M</i>	4.12	4.01	3.87	4.01
	<i>SD</i>	0.82	0.58	0.89	0.64
Motivation					
	<i>M</i>	3.86	3.95	3.68	3.70
	<i>SD</i>	0.86	0.71	0.88	0.61

As evidenced in Table 71, EFL instructors with a Master's Degree in other fields demonstrated the lowest means with higher variations. Despite nuanced differences, EFL instructors in all the other groups perceived the constructs similarly.

Specifically, the *Need to know* had the highest mean of 4.16, with the lowest variability, indicating more consistent perspectives among EFL instructors with a Master's Degree in TEFL ($SD=0.65$) and in other English-related departments ($SD=0.61$). However, instructors with a Master's Degree in other fields or without a Master's Degree displayed a relatively lower agreement with this construct with a mean ranging from 3.97 to 4.04. A similar pattern is observed across the groups as for the consideration given to the *Prior experience* except for higher variations in the responses given by instructors with a Master's Degree in TEFL and other fields as

evidenced by *SD* of 0.82 and 0.89 respectively. While EFL instructors with Master's Degree in other fields expressed the lowest agreement with the consideration given their *Readiness* to learn ($M=3.37$, $SD=0.73$). The responses given by EFL instructors for the other principles- *Self-directedness*, *Readiness*, and *Motivation* leaned towards an agreement with a mean ranging from 3.60 to 4. with a higher variability, suggesting a diverse range of opinions except for the ones without Master's Degree.

To identify potential differences in the way EFL instructors perceive *Adult Learning Principles* depending on their Master's Degree qualifications, Kruskal-Wallis test was employed (Table 72).

Table 72

Kruskal-Wallis Rank Score Test for the Comparison of EFL Instructors' Perceptions of ALPs Based on Master's Degree

Constructs	Mean Rank of Master's Degree				χ^2	<i>df</i>	<i>p</i>
	TEFL (<i>n</i> =25)	English Language (<i>n</i> =28)	Other (<i>n</i> =33)	None (<i>n</i> =51)			
Self-Directedness	75.00	79.39	60.48	65.86	4.466	3	.215
Need to Know	73.18	73.39	67.08	65.78	1.083	3	.781
Readiness	70.14	87.80	55.95	66.56	10.438	3	.015
Prior Experience	75.62	67.89	64.77	69.10	1.216	3	.749
Motivation	72.92	80.16	65.97	62.91	3.980	3	.264

According to the findings presented in Table 72, there is a statistically significant difference in instructors' perceptions related to *Readiness* based on their master's degree ($\chi^2(3)=10.438$, $p=.015$).

To locate the difference in the instructors' perceptions based on their Master's degree, a pairwise comparison with Dunn's test as a post hoc was run (Table 73).

Table 73*Pairwise Comparison Test of Readiness by Master's Degree*

Construct	Master's Degree	Test Statistic	Standard Error	<i>p</i>
Readiness	Other (n=33)- None (n=51)	-10.604	8.706	1.000
	Other (n=33)- TEFL(n=25)	14.185	10.333	1.000
	Other(n=33)-English Language (n=28)	31.849	10.013	.009
	None (n=51)- TEFL(n=25)	3.581	9.515	1.000
	None (n=51)- English Language (n=28)	21.245	9.166	.123
	TEFL(n=25)-English Language (n=28)	-17.664	10.723	.597

As for *Readiness*, significance values have been adjusted by the Bonferroni correction for multiple tests. The results of the test evidenced (Table 73), there is a statistically significant difference in instructors' perception regarding *Readiness* between instructors with Master's degrees in English-related departments and those with Master's degrees in other fields.

Master's Degree: APDE

Table 74 displays the means (M) and standard deviations (S) for *Process Design Elements- Preparing the learner, Climate setting, Setting objectives, Designing learning experiences, Learning activities, and Evaluation of learning-* as perceived by EFL instructors with different Master's Degree qualifications.

Table 74*Adult Process Design Elements (APDE): Master's Degree (N = 137)*

Constructs		TEFL (n=25)	Eng_ Language (n=28)	Other (n=33)	None (n=51)
Preparing the Learner					
	<i>M</i>	3.53	3.63	3.20	3.55
	<i>SD</i>	0.74	0.82	0.77	0.62
Climate Setting					
	<i>M</i>	3.60	3.64	3.53	3.66
	<i>SD</i>	0.75	0.90	0.79	0.60
Setting Objectives					
	<i>M</i>	3.60	3.60	3.29	3.53
	<i>SD</i>	0.80	0.86	0.83	0.63
Design Learning Experiences					
	<i>M</i>	3.54	3.53	2.86	3.35
	<i>SD</i>	0.87	0.87	0.95	0.70
Learning Activities					
	<i>M</i>	2.72	2.78	2.95	2.74
	<i>SD</i>	0.67	0.77	0.93	0.75
Evaluation of Learning					
	<i>M</i>	3.32	3.38	2.95	3.19
	<i>SD</i>	0.76	0.82	0.86	0.75

As indicated in Table 74, EFL instructors in all groups, except for EFL instructors with a Master's Degree in other fields, expressed their agreement with a mean of around 3.50 for *Preparing the learner*, *Climate setting*, *Setting objectives*, and *Designing learning experiences*. However, EFL instructors with a Master's Degree in other fields had a neutral stance for consideration given to *Preparing the learner* ($M=3.20$, $SD=0.77$), *Setting objectives* ($M=3.29$, $SD=0.83$), *Designing learning experiences* ($M=2.86$, $SD=0.95$), and for the *Evaluation of learning* ($M=2.95$, $SD=0.86$) in the PDAs. Overall, the responses by EFL instructors with a Master's Degree in other English-related exhibit the highest variability, suggesting a diverse range of opinions; however, a common consensus is observed in the answers

given by EFL instructors without a Master's Degree For *Learning activities*, in which the items were reversed-, and *the Evaluation of learning*- EFL instructors with different Master's Degree qualifications had a neutral stance with a mean of around 3 with moderate variability in their responses.

To examine potential variations in EFL instructors' perceptions of the constructs of APDE, *Preparing the learner*, *Designing learning experiences*, *Learning activities*, and *Evaluation of learning* based on Master's Degree qualifications, the Kruskal Wallis was employed (Table 75).

Table 75

Kruskal-Wallis Rank Score Test for the Comparison of EFL Instructors' Perceptions of Preparing the Learner, Designing Learning Experiences and Evaluation of Learning in PDAs Based on Master's Degree

Constructs	Mean Rank of Master's Degree				χ^2	df	p
	TEFL (n=25)	English Language (n=28)	Other (n=33)	None (n=51)			
Preparing the Learner	71.64	80.77	55.18	70.19	6.814	3	.078
Designing Learning Experiences	78.26	79.82	51.05	70.14	10.705	3	.013
Evaluation of Learning	72.14	80.00	60.05	67.22	4.358	3	.225

As shown in Table 75, statistically significant difference was found in instructors' perceptions related to *Designing Learning Experiences* based on their possession of a Master's degree ($\chi^2(3) = 10.705$, $p = .013$). In other words, instructors with a Master's degree in other fields expressed lower agreement with their involvement in *Designing Learning Experiences*.

Thus, a pairwise comparison Dunn's test was conducted to locate the difference in instructors' perceptions by Master's degree and reported below (Table 76).

Table 76*Pairwise Comparison Test for Designing Learning Experiences by Master's Degree*

Construct	Master's Degree	Test Statistic	Standard Error	<i>p</i>
Designing Learning Experiences	Other (n=33)-None(n=51)	-19.092	8.671	.166
	Other (n=33)-TEFL(n=25)	27.215	10.291	.049
	Other(n=33)-English Language (n=28)	28.776	9.972	.023
	None (n=51)-TEFL(n=25)	8.123	9.476	1.000
	None (n=51)- English Language (n=28)	9.684	9.129	1.000
	TEFL(n=25)-English Language (n=28)	-1.561	10.680	1.000

As for *Designing Learning Experiences*, significance values were adjusted by the Bonferroni correction for multiple tests. The results show that there was a statistically significant difference in instructors' perceptions between those with a Master's degree in other fields and those in other English-related departments and the ones with Master's degree in TEFL. In other words, instructors with a Master's degree in other fields expressed lower agreement with their involvement in *Designing Learning Experiences* (Table 76).

As for *Climate setting*, *Setting objectives*, and *Learning activities*, one-way ANOVA was applied to examine potential differences in instructors' perceptions based on the type of Master's Degree (Table 77).

Table 77

The Results of One-way ANOVA Concerning Setting Climate, Setting Objectives, and Learning Activities Based on the Possession of Master's Degree

Constructs	TEFL (n=25)		English Language (n=28)		Other (n=33)		None (n=51)		<i>F</i> (2,13)
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Climate	3.60	0.75	3.64	0.90	3.53	0.79	3.66	0.60	.252
Setting	3.60	0.80	3.60	0.86	3.29	0.83	3.53	0.63	1.161
Objectives	2.72	0.67	2.78	0.77	2.95	0.93	2.74	0.75	.587
Learning Activities									

According to the results of the one-way ANOVA test (Table 77), there was statistically no significant difference in EFL instructors' perceptions of *Climate setting*, *Setting objectives*, and *Learning activities* based on their Master's Degree qualifications. The results for *Climate setting* were ($F_{2,13}=.252$, $p> .005$), The results for *Setting objectives* were ($F_{2,13}=1.161$, $p> .005$) and finally, the results for *Learning activities* were ($F_{2,13}=587$, $p> .005$).

Ph.D.

ALP &APDE

Table 78 presents the descriptive analysis of how EFL instructors perceive the *Adult Learning Principles* and *Process Design Elements* in relation to their Ph.D. qualifications. The study had 10 EFL instructors with a Ph.D. in English language, 7 with a Ph. D. in other fields and 120 without a Ph.D.

Table 78*ALP and APDE: Ph.D. (N = 137)*

Framework		English Language (<i>n</i> =10)	Other (<i>n</i> =7)	None (<i>n</i> =120)
Adult Learning Principles	<i>M</i>	3.78	3.97	3.87
	<i>SD</i>	0.79	0.82	0.58
Process Design Elements	<i>M</i>	3.06	3.50	3.44
	<i>SD</i>	0.87	0.91	0.66

As indicated in Table 78, there is a higher degree of agreement on *Adult Learning Principles* among EFL instructors with different Ph.D. qualifications: in the English language ($M=3.78$, $SD=0.79$), in other fields ($M=3.97$, $SD=0.82$) exhibiting a higher variability, and those without a Ph.D. ($M=3.87$, $SD=0.58$) with a lower standard deviation indicating greater consensus among this group.

As for *Process Design Elements*, responses given by EFL instructors with Ph.D. in other fields and those without Ph.D. leaned toward an agreement with a higher variability ($M=3.50$, $SD=0.91$) and with a lower variability ($M=3.44$, $SD=0.66$) respectively. However, EFL instructors with a Ph.D. had a neutral stance ($M=3.06$, $SD=0.87$) on *Process Design Elements*.

To examine potential differences in EFL instructors' perceptions of ALP and APDE based on their Ph.D. qualifications, the Kruskal-Wallis test was conducted (Table 79).

Table 79

Kruskal-Wallis Rank Score Test for the Comparison of EFL Instructors' Perceptions of ALPs and APDEs based on Possession of Ph.D.

Framework	Mean Rank of Ph.D.			χ^2	df	p
	English Language related (n=10)	Other (n=7)	None (n=120)			
Adult Learning Principles	69.05	83.14	68.17	0.942	2	.624
Process Design Elements	52.40	73.43	70.13	1.934	2	.380

As shown in Table 79, no statistically significant difference was found in EFL instructors' perceptions of ALP and APDE based on their Ph.D. qualifications.

Ph.D.: ALP

Table 80 demonstrates the mean (M) and the standard deviations (S) of EFL instructors' responses to *Adult Learning Principles*, based on Ph.D. qualifications. As presented in Table 80, EFL instructors possessing different Ph.D. qualifications agreed most with the consideration given to their *Need to know* followed by *Prior experience* and *Self-directedness* with a mean of around 4. Likewise, as for consideration given to *Readiness* to learn and *Motivation*, EFL instructors with various Ph.D. qualifications agreed with the items with a mean above 3.50. The greater standard deviation in the responses for *Readiness* and *Motivation*, as observed among instructors with a Ph. D, suggests a wider range of answers provided for the items compared to the ones without a Ph.D.

Table 80*Adult Learning Principles (ALP): Ph.D. (N = 137)*

Constructs		English Language (n=10)	Other (n=7)	None (n=120)
Self-directedness				
	<i>M</i>	3.90	4.14	3.83
	<i>SD</i>	0.93	0.99	0.72
Need to Know				
	<i>M</i>	4.05	4.14	4.07
	<i>SD</i>	0.77	0.77	0.61
Readiness				
	<i>M</i>	3.56	3.66	3.63
	<i>SD</i>	1.06	1.01	0.68
Prior Experience				
	<i>M</i>	3.85	4.00	4.01
	<i>SD</i>	0.52	0.76	0.74
Motivation				
	<i>M</i>	3.56	3.90	3.79
	<i>SD</i>	1.00	0.91	0.72

To examine differences in EFL instructors' perceptions of *Adult Learning Principles* based on their respective Ph.D. qualifications, Kruskal-Wallis was employed and reported in Table 81.

Table 81

Kruskal-Wallis Rank Score Test for the Comparison of EFL Instructors' Perceptions of ALPs Based on Possession of Ph.D.

Constructs	<u>Mean Rank of Ph.D.</u>			χ^2	<i>df</i>	<i>p</i>
	English Language related (n=10)	Other (n=7)	None (n=120)			
Self-directedness	74.20	93.93	67.11	3.306	2	.191
Need to Know	67.05	78.93	68.58	0.498	2	.779
Readiness	73.90	74.71	68.26	0.352	2	.839
Prior Experience	57.90	70.36	69.85	0.941	2	.625
Motivation	61.05	81.71	68.92	1.158	2	.561

As shown in Table 81, no statistically significant difference was found in EFL instructors' perceptions of ALP based on their Ph.D. qualifications.

Table 82 shows descriptive statistics of the EFL instructors' perceptions of APDE based on their Ph.D. qualifications.

Table 82

Adult Process Design Elements (APDE): Ph.D. (N = 137)

Constructs		English Language (n=10)	Other (n=7)	None (n=120)
Preparing the Learner				
	<i>M</i>	3.13	3.52	3.50
	<i>SD</i>	0.95	0.89	0.70
Climate Setting				
	<i>M</i>	3.23	3.69	3.64
	<i>SD</i>	0.90	0.89	0.71
Setting Objectives				
	<i>M</i>	3.08	3.66	3.52
	<i>SD</i>	1.07	0.81	0.73
Design Learning Experiences				
	<i>M</i>	3.00	3.21	3.33
	<i>SD</i>	0.84	0.99	0.86
Learning Activities				
	<i>M</i>	3.35	2.71	2.75
	<i>SD</i>	0.74	0.90	0.77
Evaluation of Learning				
	<i>M</i>	2.86	3.42	3.21
	<i>SD</i>	0.87	1.15	0.77

As indicated in Table 82, while EFL instructors with a Ph.D. in ELT had a neutral stance for *Preparing the learner*, *Climate setting*, and *Setting objective* with a higher variability in their responses, instructors with a Ph. D. in other fields or the ones without a Ph.D. expressed their agreement with these constructs with a mean above 3.50. As for *Designing learning experiences*, EFL instructors across the groups remained neutral with the items with moderate variability in their responses. Specifically, the responses given by EFL instructors with Ph.D. had a mean of 3.

($SD=0.84$), the ones with a Ph.D. in other fields had 3.21 ($SD=0.99$) and those without a Ph.D. had a mean of 3.33 ($SD=0.86$). EFL instructors expressed the lowest agreement with the way *Learning activities* were conducted and the *Evaluation of learning*. EFL instructors remained neutral as to their active role in learning activities with a moderate variability in their answers. Likewise, responses regarding the *Evaluation of Learning* consistently exhibited lower means and higher variability, except those with a Ph.D. in different fields, who showed a slightly positive inclination ($M= 3.42$, $SD=1.15$) and a higher variability.

To examine possible variations in the perceptions of EFL instructors with different Ph.D. qualifications related to APDE- *Preparing the learner*, *Designing learning experiences*, *Learning activities*, and *Evaluation of learning*-, the Kruskal-Wallis was employed (Table 83). As for *Climate setting*, *Setting objectives*, and *Learning activities*, one-way ANOVA was applied to the same end (Table 84).

Table 83

Kruskal-Wallis Rank Score Test for the Comparison of EFL Instructors' Perceptions of APDEs Based on Ph. D.

Constructs	Mean Rank of Ph.D.			χ^2	df	p
	English Language related ($n=10$)	Other ($n=7$)	None ($n=120$)			
Preparing the Learner	54.45	75.00	69.86	1.607	2	.448
Designing Learning Experiences	56.45	65.71	70.24	1.218	2	.544
Learning Activities	95.50	70.07	66.73	5.061	2	.080
Evaluation of Learning	53.30	78.86	69.73	2.171	2	.338

As shown in Table 83, there was statistically no significant difference in instructors' perceptions related to PDAs based on their possession of a Ph.D.

Table 84 displays the results of the one-way ANOVA test which examines the potential differences in EFL instructors' perceptions of the subconstructs of *Climate setting*, and *Setting objectives* based on their Ph.D. qualifications.

Table 84

The Results of One-way ANOVA Related to Setting Climate and Setting Objectives Based on Ph.D. Qualifications

Constructs	English Language related (n=10)		Other (n=7)		None (n=120)		<i>F</i> (2,13)
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Climate Setting	3.23	0.90	3.69	0.89	3.64	0.71	1.501
Setting Objectives	3.08	1.07	3.66	0.81	3.52	0.73	1.737

According to the results of the one-way ANOVA test (Table 84), there was statistically no significant difference in EFL instructors' perceptions of *Climate setting* and *Setting objectives* based on Ph.D. qualifications. The results for *Climate setting* were ($F_{2,13}=1.501$, $p=>.005$) and the results for *Setting objectives* were ($F_{2,13}=1.137$, $p=>.005$).

Possession of Ph.D.

ALP & APDE

Table 85 displays the mean (*M*) and standard deviations (*S*) for the *Adult Learning Principles* and *Process Design Elements* as perceived by EFL instructors, both with and a without Ph.D. In the study, there were 17 EFL instructors with a Ph.D. and 120 without one.

Table 85*ALP and APDE: Possession of Ph.D. (N = 137)*

Framework	With a Ph.D. (n= 17)	Without a Ph.D (n= 120)
Adult Learning Principles		
<i>M</i>	3.86	3.87
<i>SD</i>	0.78	0.58
Process Design Elements		
<i>M</i>	3.24	3.44
<i>SD</i>	0.89	0.66

As indicated in Table 85, EFL instructors, both with and without a Ph.D., agreed with consideration given to *Adult Learning Principles* with a mean of 3.87(*SD*=0.78 and *SD*=0.58) respectively. This indicates more diverse perspectives in the responses of the former and a common agreement in the latter.

As for *Process Design Elements*, EFL instructors holding a Ph.D. exhibited a slightly lower agreement with a mean of 3.24 and a higher variability in their responses (*SD*=0.89), compared to the ones without a Ph.D. (*M*=3.44, *SD*=0.66) who showed a more common agreement.

To examine potential differences in EFL instructors' perceptions regarding *Adult Learning Principles* and *Process Design Elements* based on their possession of a Ph.D., the Mann-Whitney U test was employed (Table 86).

Table 86

Mann-Whitney U Test for the Comparison of EFL Instructors' Perceptions of ALPs and APDEs by Possession of Ph.D.

Framework	<u>Mean Rank of</u> <u>Ph. D.</u>		<u>Sum of</u> <u>Ranks</u>		<i>U</i>	<i>z</i>	<i>p</i>
	With a Ph.D. (<i>n</i> = 17)	Without a Ph.D. (<i>n</i> =120)	With a Ph.D. (<i>n</i> = 17)	Without a Ph.D. (<i>n</i> = 120)			
Adult Learning Principles	74.85	68.17	1272.50	8180.50	920.50	-.650	.516
Process Design Elements	61.06	70.13	1038.00	8415.00	885.00	-.882	.378

As shown in Table 86, no statistically significant difference was found in EFL instructors' perceptions of ALP and APDE based on their Ph.D. qualifications.

Possession of Ph. D.: ALP

Table 87 demonstrates descriptive statistics of the perceptions of EFL instructors, both with a Ph.D. and a without Ph.D., concerning *the Adult Learning Principles*.

Table 87

Adult Learning Principles (ALP): Possession of a Ph. D. (N = 137)

Constructs		With a Ph.D. (<i>n</i> =17)	Without a Ph.D. (<i>n</i> =120)
Self-directedness	<i>M</i>	4.00	3.83
	<i>SD</i>	0.93	0.72
Need to Know	<i>M</i>	4.08	4.07
	<i>SD</i>	0.74	0.61
Readiness	<i>M</i>	3.60	3.63
	<i>SD</i>	1.01	0.68
Prior Experience	<i>M</i>	3.91	4.01
	<i>SD</i>	0.61	0.74

Constructs	With a Ph.D. (n=17)	Without a Ph.D. (n=120)
Motivation		
<i>M</i>	3.70	3.79
<i>SD</i>	0.95	0.72

As evidenced in Table 87, EFL instructors with or without a Ph.D. qualification agreed most with the consideration given to their *Need to know* followed by *Self-directedness* and *Prior experience* with a mean of around 4. The responses by EFL instructors with a Ph.D. for *Need to know* and *Self-directedness* demonstrated a higher variability, suggesting diverse perspectives within the group. As for *Motivation*, both instructors with a Ph.D. and without one agreed with the items, reporting a mean of 3.70 with moderate variations and 3.79, indicating a consensus, respectively. Finally, EFL instructors with a Ph.D. ($M=3.60$, $SD=1.01$) and without one ($M=3.63$, $SD=0.68$) expressed their agreement with consideration given to their *Readiness*, with the former group indicating moderate variations in their responses.

To examine potential differences in EFL instructors' perceptions of *Adult Learning Principles* based on their respective Ph.D. qualifications, Mann-Whitney U was employed and reported below in Table 88.

Table 88

Mann-Whitney U Test for the Perceptions of EFL Instructors Related to ALPs Based on the Possession of Ph.D.

Constructs	Mean Rank		Sum of Ranks		<i>U</i>	<i>z</i>	<i>p</i>
	With a Ph.D. (n=17)	Without a Ph.D. (n=120)	With a Ph.D. (n=17)	Without a Ph.D. (n=120)			
Self-directedness	82.32	67.11	1399.50	8053.50	793.50	-1.502	.133
Need to Know	71.94	68.58	1223.00	8230.00	970.00	-.334	.738

Constructs	Mean Rank		Sum of Ranks		<i>U</i>	<i>z</i>	<i>p</i>
	With a Ph.D. (<i>n</i> =17)	Without a Ph.D. (<i>n</i> =120)	With a Ph.D. (<i>n</i> =17)	Without a Ph.D. (<i>n</i> =120)			
Readiness	74.24	68.26	1262.00	8191.00	931.00	-.592	.554
Prior Experience	63.03	69.85	1071.50	8381.50	918.50	-.699	.484
Motivation	69.56	68.92	1182.50	8270.50	1010.50	-.063	.950

As demonstrated in Table 88, there was no statistically significant difference in instructors' perceptions related to PDAs based on their possession of a Ph. D across the constructs.

Possession of Ph. D.: APDE

Table 89 shows how EFL instructors with a Ph. D. and without one perceive *Process and Design Elements: Preparing the learner, Climate setting, Setting objectives, Designing learning experiences, Learning activities, and Evaluation of learning.*

Table 89

Adult Process Design Elements (APDE): Possession of Ph.D. (N = 137)

Constructs		With a Ph.D. (<i>n</i> =17)	Without a Ph.D. (<i>n</i> =120)
Preparing the Learner	<i>M</i>	3.29	3.50
	<i>SD</i>	0.92	0.70
Climate Setting	<i>M</i>	3.42	3.64
	<i>SD</i>	0.90	0.71
Setting Objectives	<i>M</i>	3.23	3.52
	<i>SD</i>	0.99	0.73
Design Learning Experiences	<i>M</i>	3.08	3.33
	<i>SD</i>	0.88	0.86

Constructs		With a Ph.D. (n=17)	Without a Ph.D. (n=120)
Learning Activities	<i>M</i>	3.08	2.75
	<i>SD</i>	0.85	0.77
Evaluation of Learning	<i>M</i>	3.09	3.21
	<i>SD</i>	1.00	0.77

As demonstrated in Table 89, EFL instructors with a Ph.D. had a relatively lower agreement and higher variability across all the constructs compared to the ones without a Ph.D. Specifically, EFL instructors without a Ph.D. agreed with *Preparing the learner*, *Climate setting*, and *Setting objectives* with a mean of 3.50, 3.64, and 3.52 respectively; however, the ones with a Ph.D. expressed a lower agreement with a mean of 3.29, 3.42, and 3.23 with higher variability. As for *Designing learning experiences*, *Learning activities* and the *Evaluation of learning*, both EFL instructors with a Ph.D. and without one remained neutral with the items with a mean ranging from 3.08 to 3.38. Notably, the higher variability of the responses is consistently observed among instructors with Ph.D. holders for these subconstructs.

To examine if EFL instructors' perceptions of PDAs within the *Process Design* and *Delivery Elements* differ based on their possession of a Ph.D., the Mann-Whitney U test was implemented for *Preparing the learner*, *Designing learning experiences*, *Learning activities*, and *Evaluation of learning* (Table 90). As for *Climate setting* and *Setting objectives*, an independent t-test was used to this end (Table 91).

Table 90

Mann-Whitney U Test for the Comparison of EFL Instructors' Perceptions of APDEs Based on the Possession of Ph.D.

Constructs	<u>Mean Rank of</u> Ph.D.		<u>Sum of Ranks</u>		<i>U</i>	<i>z</i>	<i>p</i>
	With a Ph.D. (<i>n</i> =17)	Without a Ph.D. (<i>n</i> =12)	With a Ph.D. (<i>n</i> =17)	Without a Ph.D. (<i>n</i> =12)			
Preparing the Learner	62.91	69.86	1069.50	8383.50	916.50	-.686	.493
Designing Learning Experiences	60.26	70.24	1024.50	8428.50	871.50	-.992	.321
Learning Activities	85.03	66.73	1445.50	8007.50	747.50	-1.816	.069
Evaluation of Learning	63.82	69.73	1085.00	8368.00	932.00	-.593	.553

Table 90 displays the findings of the Mann-Whitney U test, which examined if EFL instructors' perceptions related to PDAs vary within the *Process and Design Elements*, comparing the ones with a Ph.D. and without a Ph.D. As evidenced in Table 90, there was statistically no difference between the perceptions of the EFL instructors with Ph.D. and ones without related to PDAs offered to them within *Process Design and Delivery Elements*.

To examine the potential differences in EFL instructors' perceptions of the way the climate and objectives are set based on their possession of Ph.D., an independent t-test was employed and reported in Table 91.

Table 91

The Results of the Independent T-test for Climate Setting and Setting Objectives Based on the Possession of Ph.D.

Constructs	With a Ph.D.		Without a Ph.D.		t(135)	p
	M	SD	M	SD		
Climate Setting	3.42	0.90	3.64	0.71	1.409	.237
Setting Objectives	3.32	0.99	3.52	0.73	1.066	.304

As seen in Table 91, no statistical difference was found between the perceptions of EFL instructors with a Ph.D. ($M=3.42$, $SD=0.90$) and those without a Ph.D. ($M=3.64$, $SD=0.71$) regarding their perceptions of *Climate setting* in the PDAs offered to them in their institutions ($t(137) = 1.409$, $p=.237$). Likewise, there was statistically no significant difference in EFL instructors' perceptions regarding how the objectives are set based on their possession of a Ph.D. The EFL instructors holding a Ph.D. remained neutral with this construct with a mean of 3.32 ($SD=0.99$) while the ones without a Ph.D. agreed with *Setting objectives* with a mean of 3.52 ($SD=0.73$). However, the difference was not statistically significant as evidenced in the findings of the independent t-test ($t(137) = 1.066$, $p = .304$).

Certifications

ALP & APDE

Table 92 presents the mean (M) and standard deviations (S) of EFL instructors' perceptions of *the Adult Learning Principles and Process Design Elements* in relation to the certifications they hold. In the study 14 of the EFL instructors had CELTA and/or ICALT, 22 of them had DELTA and/or TESOL, 66 of them had no certifications and 35 of the instructors had other certifications not mentioned in the questionnaire.

Table 92*ALP and APDE: Certifications (N = 137)*

Framework	CELTA & ICALT (n=14)	DELTA & TESOL (n=22)	None (n=66)	Other (n=35)
Adult Learning Principles				
M	3.85	4.05	3.80	3.88
SD	0.46	0.49	0.67	0.58
Process Design Elements				
M	3.53	3.51	3.34	3.46
SD	0.52	0.58	0.74	0.73

Table 92 shows that EFL instructors with DELTA and/or TESOL agreed with *Adult Learning Principles* most ($M=4.05$, $SD=0.49$), while instructors in all the other groups expressed a relatively lower agreement with a mean of around 3.80. The subtle variations in responses reflect a consistent agreement across the groups.

EFL instructors with diverse certifications agreed with *Adult Process Design Elements* with a mean ranging from 3.46 to 3.51. However, EFL instructors holding no certifications remained neutral with the consideration given to the *Adult Process Design Elements* with a mean of 3.34 ($SD=0.74$) with higher variations in their responses.

To investigate potential differences in the EFL instructors' perceptions of PDAs based on their certifications, the Kruskal Wallis test was conducted and reported in Table 93.

Table 93

Kruskal-Wallis Rank Score Test for the Comparison of EFL Instructors' Perceptions of ALPs and APDEs Based on Type of Certifications

Framework	Mean Rank of Certifications				χ^2	df	p
	CELTA& ICELT (n=14)	DELTA& TESOL (n=22)	None (n=66)	Other (n=35)			
Adult Learning Principle	63.07	84.50	64.36	70.39	4.616	3	.202
Process Design Elements	75.21	73.77	65.17	70.73	1.341	3	.719

As demonstrated in Table 93, no statistically significant difference was found in EFL instructors' perceptions of ALP and APDE based on the certifications they hold.

Certification: ALP

Table 94 demonstrates how EFL instructors perceive the constructs of *Adult Learning Principles* in the PDAs provided based on their possession of certifications.

Table 94

Adult Learning Principles (ALP): Certifications (N = 137)

Constructs		CELTA & ICELT (n=14)	DELTA & TESOL (n=22)	None (n=66)	Other (n=35)
Self-directedness	<i>M</i>	3.90	3.93	3.79	3.89
	<i>SD</i>	0.73	0.73	0.78	0.70
Need to Know	<i>M</i>	4.01	4.22	4.00	4.12
	<i>SD</i>	0.62	0.48	0.68	0.61
Readiness	<i>M</i>	3.54	3.89	3.54	3.67
	<i>SD</i>	0.49	0.71	0.81	0.63

Constructs		CELTA & ICALT (n=14)	DELTA & TESOL (n=22)	None (n=66)	Other (n=35)
Prior Experience					
	<i>M</i>	4.00	4.20	3.94	3.98
	<i>SD</i>	0.65	0.59	0.78	0.74
Motivation					
	<i>M</i>	3.80	4.01	3.72	3.72
	<i>SD</i>	0.53	0.56	0.84	0.74

As demonstrated in Table 94, EFL instructors across all the categories demonstrated agreement with the items in *Need to know* why, what and how to learn in the PDAs with a mean above 4 and exhibited subtle variations. This was followed by *Prior experience* with a mean of around 4, indicating a shared consensus among EFL instructors with CELTA & ICALT and TESOL & DELTA, while other groups showed slightly higher variations in other groups. EFL instructors also agreed with allowance given for *Self-directedness* and consideration given to *Motivation* with a mean ranging from 3.70 to 4.01 with a standard deviation ranging from 0.70 to 0.78. As for their *Readiness* to learn, EFL instructors across all the categories expressed their lowest agreement. EFL instructors holding CELTA and, or ICALT and those without any certification agreed with the items related to *Readiness* with a mean of 3.54 and an *SD* of 0.49 and 0.81 respectively. This indicates a shared consensus among those holding CELTA & DELTA and a high variability of the responses among those without any certifications. Instructors with a TESOL and, or DELTA and the ones with other types of certifications agreed with this construct with a slightly higher mean of 3.89 (*SD*=0.71) and 3.67 (*SD*=0.63) respectively.

The Kruskal-Wallis was employed to examine potential differences in instructors' perceptions based on their certifications (Table 95).

Table 95

Kruskal-Wallis Rank Score Test for the Comparison of EFL Instructors' Perceptions of ALPs Based on Type of Certifications

Constructs	Mean Rank of Certifications				χ^2	df	p
	CELTA& /ICELT (n=14)	DELTA& /TESOL (n=22)	None (n=66)	Other (n=35)			
Self-Directedness	71.21	74.32	66.88	68.77	0.648	3	.885
Need to Know	59.43	78.48	64.86	74.69	3.677	3	.299
Readiness	60.96	83.02	64.96	71.01	4.246	3	.236
Prior Experience	69.46	79.14	65.70	68.67	2.112	3	.550
Motivation	68.07	78.68	67.81	65.53	1.699	3	.637

As demonstrated in Table 95, no statistically significant difference was observed in EFL instructors' perceptions based on the certifications they had.

Certifications: APDE

Table 96 reveals the descriptive analysis of EFL instructors' perceptions of the *Adult Learning Process and Design Elements - Preparing the learner, Climate setting, Setting objectives, Designing learning experiences, Learning activities, and Evaluation of learning-* based on the certifications they hold.

Table 96

Adult Process Design Elements (APDE): Certifications (N=137)

Constructs		CELTA & ICELT (n=14)	DELTA & TESOL (n=22)	None (n=66)	Other (n=35)
Preparing the Learner					
	<i>M</i>	3.61	3.80	3.36	3.43
	<i>SD</i>	0.59	0.51	0.81	0.69
Climate Setting					
	<i>M</i>	3.55	3.57	3.58	3.74
	<i>SD</i>	0.69	0.70	0.79	0.69
Setting Objectives					
	<i>M</i>	3.69	3.55	3.40	3.58
	<i>SD</i>	0.51	0.74	0.79	0.81

Constructs		CELTA & ICALT (n=14)	DELTA & TESOL (n=22)	None (n=66)	Other (n=35)
Design Learning Experiences					
	<i>M</i>	3.39	3.40	3.23	3.34
	<i>SD</i>	0.68	0.76	0.92	0.91
Learning Activities					
	<i>M</i>	2.67	2.70	2.81	2.87
	<i>SD</i>	0.79	0.62	0.76	0.94
Evaluation of Learning					
	<i>M</i>	3.42	3.24	3.14	3.19
	<i>SD</i>	0.52	0.81	0.82	0.86

As indicated in Table 96, *Climate setting* had the highest mean score slightly above 3.5 across all the categories with subtle variations followed by *Setting objectives*. *Setting objectives* displayed the highest mean of 3.69 with the lowest variability ($SD = 0.51$) among EFL instructors with a CELTA&DELTA. EFL instructors with a DELTA & TESOL certification(s), and those with others agreed with this subconstruct with a mean of above 3.5 except for the ones with no certifications with higher variability in their responses ($M=3.40$, $SD=0.79$). For *Preparing the learner*, EFL instructors with a CELTA and/or ICALT agreed with the items with a mean of 3.61 exhibiting a lower variability ($SD=0.59$) and 3.80 ($SD=0.51$) respectively. EFL instructors with no certification and the ones with other types of certifications had a neutral stance ($M=3.36$, $SD=0.81$; $M=3.41$, $SD=0.69$) respectively. Concerning the *Designing learning experiences*, *Learning activities*, in which the items were reversed, and *Evaluation of learning*, all the EFL instructors had a neutral stance with a mean ranging from 3.20 to 3.40 with moderate variations across the groups.

To compare potential differences in EFL instructors' perceptions of *Preparing the learner*, *Designing learning experiences*, and *Evaluation of learning*

based on certifications held, the Kruskal Wallis was employed (Table 97). As for *Setting objectives*, and *Learning activities*, one-way ANOVA was used to the same end and the findings were presented in Table 98.

Table 97

Kruskal-Wallis Rank Score Test for the Comparison of EFL Instructors' Perceptions of APDEs Based on Certifications

Constructs	Mean Rank of Certifications				χ^2	df	p
	CELTA& ICELT (n=14)	DELTA& TESOL (n=22)	None (n=66)	Other (n=35)			
Preparing the Learner	74.82	87.86	62.69	66.71	7.265	3	.064
Climate Setting	67.50	67.34	67.42	73.63	0.645	3	.886
Designing Learning Experiences	70.21	73.84	66.31	70.54	0.728	3	.867
Evaluation of Learning	82.04	69.30	65.57	69.70	2.089	3	.554

As evidenced in Table 97, there was statistically no significant difference in instructors' perceptions related to PDAs based on their possession of certifications.

Table 98 presents the findings of the one-way ANOVA test which examines the potential differences in EFL instructors' perceptions of the constructs of *Setting objectives* and *Learning activities* based on certifications they had.

Table 98

The findings of one-way ANOVA- Setting Objectives and Learning Activities based on Certifications

Constructs	CELTA& /ICELT (n=14)		DELTA& /TESOL (n=22)		None (n=66)		Other (n=35)		F(2,13)
	M	SD	M	SD	M	SD	M	SD	
Setting Objectives	3.69	0.51	3.55	0.74	3.40	0.79	3.58	0.81	.805

Constructs	CELTA& /ICELT (n=14)		DELTA& /TESOL (n=22)		None (n=66)		Other (n=35)		$F(2,13)$
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Learning Activities	2.67	0.74	2.70	0.62	2.81	0.76	2.87	0.94	.320

According to the results of the one-way ANOVA test, there was statistically no significant difference in EFL instructors' perceptions of *Setting objectives* and *Learning activities* based on the certifications they possess as shown in Table 98. The results for *Setting objectives* were ($F_{2,13}=.805, p>.005$) and for *Learning activities* ($F_{2,13}=.320, p>.005$).

Type of Higher Education (HE) Institution

ALP & APDE

Table 99 demonstrates the mean (M) and standard deviations (S) of EFL instructors' perceptions of the *Adult Learning Principles* and *Process Design Elements* depending on the type of university they work for. In the study, the number of EFL instructors in state universities was 91, and the number of instructors in foundation universities was 46.

Table 99

ALP and APDE: Type of HE (N=137)

Framework	State (n= 91)	Foundation (n= 46)
Adult Learning Principles		
<i>M</i>	3.76	4.07
<i>SD</i>	0.60	0.56
Process Design Elements		
<i>M</i>	3.24	3.77
<i>SD</i>	0.62	0.68

As indicated in Table 99, EFL instructors both in state and foundation universities agreed with the consideration given to *the Adult Learning Principles* with a mean of 3.76 ($SD=0.60$) and 4.07 ($SD=0.56$) respectively.

Regarding *Process Design Elements* in the PDAs, EFL instructors in state universities had a neutral stance ($M=3.24$, $SD=0.62$) while the ones in foundation universities expressed their agreement ($M=3.77$, $SD=0.68$). The standard deviation across all the constructs indicates a common agreement among instructors.

To examine potential differences in EFL instructors' perceptions concerning *Adult Learning Principles* and *Process Design Elements* depending on the type of HE they work for, the Mann-Whitney U test was employed (Table 100).

Table 100

Mann-Whitney U Test for the Comparison of EFL Instructors' Perceptions of ALPs and APDE Based on Type of HE

Framework	<u>Mean Rank of</u> <u>Type of HE</u>		<u>Sum of</u> <u>Ranks</u>		<i>U</i>	<i>z</i>	<i>p</i>
	State (<i>n</i> =91)	Foun dation (<i>n</i> =46)	State (<i>n</i> = 91)	Foun dation (<i>n</i> = 46)			
Adult Learning Principles	61.87	83.10	5630.50	3822.50	1444.50	-2.957	.003
Process Design Elements	59.01	88.77	5369.50	4083.50	1183.50	-4.146	.000

As demonstrated in Table 100, the test results show statistically significant differences in EFL instructors' perceptions based on the type of HE they work for the constructs ($p < 0.05$). The results for *Adult Learning Principles* ($U=1444.500$; $p=0.03$) and the *Process Design Elements* ($U=1750.5$; $p=.062$) were statistically significant. To identify the differences in state and foundation EFL instructors'

perceptions of the constructs of ALP and APDE, descriptive and inferential analyses were conducted and reported below.

Type of HE: ALP

Table 101 demonstrates the descriptive statistics of EFL instructors' perceptions in state and foundation universities related to *Adult Learning Principles*.

Table 101

Adult Learning Principles (ALP): Type of HE (N=137)

Constructs		State (n= 91)	Foundation (n= 46)
Self-directedness			
	<i>M</i>	3.72	4.11
	<i>SD</i>	0.74	0.69
Need to Know			
	<i>M</i>	3.98	4.23
	<i>SD</i>	0.65	0.56
Readiness			
	<i>M</i>	3.52	3.86
	<i>SD</i>	0.73	0.68
Prior Experience			
	<i>M</i>	3.89	4.21
	<i>SD</i>	0.73	0.67
Motivation			
	<i>M</i>	3.69	3.94
	<i>SD</i>	0.78	0.66

As shown in Table 101, EFL instructors in foundation universities expressed a higher agreement with *Adult Learning Principles* compared to the ones in state universities. Across all the constructs, EFL instructors in state and foundation universities agreed with the consideration given to their *Need to know* highest with a mean of 3.98 and 4.23 respectively which is followed by the consideration given to the *Prior experience* ($M=3.89$, $SD=0.73$) and ($M=4.21$, $SD=0.67$). As for allowance given for *Self-directedness*, EFL instructors in state universities agreed with the items ($M=3.72$, $SD=0.74$) and the ones in foundation universities had a higher

agreement with a mean of 4.11 ($SD=0.69$). Consideration given to the *Readiness* to learn and *Motivation* in the offered PDAs had a lower mean in both types of universities with a mean of ranging from 3.50 to 3.94.

To investigate potential differences in EFL instructors' perceptions of *Adult Learning Principles* in the provided PDAs based on the type of higher education they work for, the Mann-Whitney U test was employed (Table 102).

Table 102

Mann-Whitney U Test for the Perceptions of EFL Instructors Based on the Type of HE

Constructs	Mean Rank		Sum of Ranks		<i>U</i>	<i>z</i>	<i>p</i>
	State (<i>n</i> =91)	Foun dation (<i>n</i> =46)	State (<i>n</i> = 91)	Foun dation (<i>n</i> =46)			
Self-directedness	62.51	81.85	5688.00	3765.00	1502.00	-2.736	.006
Need to Know	64.36	78.18	5856.50	3596.50	1670.50	-1.972	.049
Readiness	63.03	80.82	5735.50	3715.50	5735.50	-2.523	.012
Prior Experience	62.64	81.58	5700.00	3752.50	1514.50	-2.783	.005
Motivation	65.34	76.25	5945.50	3507.50	1759.50	-1.546	.122

As demonstrated in Table 102, there was a statistically significant difference in instructors' perceptions related to PDAs based on the type of higher education they work for *Self-directedness* ($U=1502.00$, $p=.006$), *Need to Know* ($U=1670.50$, $p=.049$), *Readiness* ($U=5735.50$, $p=.012$), *Prior experience* ($U=1514.50$, $p=.005$). As evidenced in Table 102, instructors' perceptions related to *Adult Learning Principles* at foundation universities were more positive compared to those in state universities. The perceptions of the instructors in these two contexts did not differ regarding the consideration given to the *Motivation*.

Type of HE: APDE

Table 103 shows the descriptive analysis of EFL instructors' perceptions of APDE, namely *Preparing the learner*, *Climate setting*, *Setting objectives*, *Designing learning experiences*, *Learning activities*, and *Evaluation of learning* in state and foundation universities.

Table 103

Adult Process Design Elements (APDE): Type of HE (N=137)

Constructs		State (n= 91)	Foundation (n= 46)
Preparing the Learner			
	<i>M</i>	3.30	3.83
	<i>SD</i>	0.71	0.65
Climate Setting			
	<i>M</i>	3.45	3.94
	<i>SD</i>	0.67	0.76
Setting Objectives			
	<i>M</i>	3.28	3.94
	<i>SD</i>	0.67	0.75
Design Learning Experiences			
	<i>M</i>	3.12	3.66
	<i>SD</i>	0.81	0.86
Learning Activities			
	<i>M</i>	3.00	2.40
	<i>SD</i>	0.77	0.65
Evaluation of Learning			
	<i>M</i>	3.05	3.48
	<i>SD</i>	0.75	0.83

As demonstrated in Table 103, EFL instructors in state universities had a neutral stance on *Preparing the learner* ($M=3.30$, $SD=0.71$), *Setting objectives* ($M=3.28$, $SD=0.67$), *Designing learning experiences* ($M=3.12$, $SD=0.71$), *Learning activities* ($M=3.00$, $SD=0.77$), and *Evaluation of learning* ($M=3.05$, $SD=0.75$). The only construct EFL instructors in the state agreed with is *Climate setting* with a mean of 3.45 ($SD=0.67$). However, EFL instructors in foundation universities expressed a

higher agreement with all the constructs with a mean above 3.48. Specifically, they agreed with *Preparing the learner* with a mean of 3.83($SD=0.65$), *Climate setting* with a mean of 3.94 ($SD=0.76$), *Setting objectives* with a mean of 3.94 ($SD=0.75$), *Designing learning experiences* with a mean of 3.66 ($SD=0.86$), *Learning activities*- in which the items were reversed- with a mean of 2.40 ($SD=0.65$), and they agreed with *Evaluation of learning* ($M=3.48$, $SD=0.83$).

To further investigate the differences in EFL instructors' perceptions of *Adult Process* and *Design Elements* - *Preparing the learner*, *Setting objectives*, *Designing learning experiences*, *Learning activities*, and *Evaluation of learning*- in state and foundation universities, the Mann- Whitney U test was employed (Table 104). As for *Climate setting*, an independent t-test was employed to examine the potential differences in EFL instructors' perceptions based on the type of HE (Table 105).

Table 104

Mann-Whitney U Test for the Comparison of EFL Instructors' Perceptions of APDEs Based on the Type of HE

Constructs	<u>Mean Rank</u>		<u>Sum of Ranks</u>		<i>U</i>	<i>z</i>	<i>p</i>
	State (n=91)	Founda tion (n=46)	State (n= 91)	Founda tion (n=46)			
Preparing the Learner	59.19	88.41	5386.00	4067.00	1200.0	-4.130	.000
Setting Objectives	57.38	91.98	5222.00	4231.00	1036.0	-4.832	.000
Designing Learning Experiences	61.42	84.00	5589.00	3864.00	1403.0	-3.216	.001
Learning Activities	78.31	50.59	7126.00	2327.00	1246.0	-3.941	.000
Evaluation of Learning	62.31	82.23	5670.50	3782.50	1484.5	-2.863	.004

Table 104 displays the findings of the Mann-Whitney U test, which examined whether EFL instructors' perceptions related to PDAs in state and foundation

universities vary within *the Process and Design Elements*. As evidenced in Table 112, there was a statistically significant difference between the perceptions of the EFL instructors in state and foundation universities related to PDAs offered to them within *Process Design and Delivery Elements*. The results for the constructs were for *Preparing the learner* ($U=1.200.0$; $p=.00$); *Setting objectives* ($U=1.036$; $p=.00$); *Designing learning experiences* ($U=1403.0$; $p=.001$); *Learning activities* ($U=1246.0$; $p=.000$); and *Evaluation of learning* ($U=1484.5$; $p=.004$).

The construct *Climate setting* was normally distributed. Therefore, an independent t-test was employed to examine the potential differences in EFL instructors' perceptions of the way climate and objectives are set based on the type of HE they work for (Table 105).

Table 105

The Results of the Independent T-test for Climate Setting Based on Type of HE

Construct	State		Foundation		<i>t</i> (135)	<i>p</i>	Cohen's <i>d</i>
	<i>(n=91)</i>		<i>(n=46)</i>				
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Climate Setting	3.45	0.67	3.94	0.76	-3.889	.000	0.68

As seen in Table 105, there was a statistically significant difference between the perceptions of EFL instructors in state universities ($M=3.45$, $SD=0.67$) and those working for foundation universities ($M=3.94$, $SD=0.76$) regarding their perceptions of *Climate setting* in the PDAs offered to them in their institutions ($t(137) = -3.889$, $p=.000$). The large effect size (Cohen's d) of 0.68 indicated a substantial difference between the two groups in their perception of the *Climate setting*.

CHAPTER 5: DISCUSSION

Introduction

In this chapter, the main findings of this study in relation to the relevant literature are discussed. Next, the implications for practice and further research are introduced. Finally, the limitations of the study are provided

Overview of the Study

The purpose of this study was to examine the EFL instructors' perceptions of the PDAs offered to them in their institutions within the framework of *Adult Learning* and *Process Design Elements*. Additionally, the study aimed to investigate whether their perceptions varied based on their gender, age, years of experience in ELT and higher education, their educational background and the type of HE they work for. To this end, the following research questions were addressed:

1. To what extent do EFL instructors in higher education perceive their professional development activities (PDAs) as adhering to the *Principles of Adult Learning*?
2. To what extent do EFL instructors in higher education context perceive their PDAs as aligning with the *Process Design Elements*?
3. Do the EFL instructors' perceptions differ by gender, age, years of ELT experience and experience in higher education, educational background, and type of higher education institution?

To address these questions, the *Adult Learning Principles and Design Elements Questionnaire* (ALPDEQ) developed by Wilson (2005) was utilized. Prior to administering the questionnaire, the researcher added a part to gather information

about the profile of the participants. Additionally, responses to open-ended questions were gathered at the end of both the *Principles of Adult Learning* section and *Process Design Elements* sections. Descriptive statistics were employed to address the first two research questions, while qualitative analysis of open-ended responses provided further interpretation. To address the third research question, inferential statistics were used to examine if instructors' perceptions differed based on gender, age, years of experience in ELT and HE, educational background and the type of HE they work for.

Discussion of Major Findings

The current study aims to investigate tertiary-level EFL instructors' perceptions of PDAs offered to them in their institution within *Adult Learning Principles* and *Process Design Elements* and examine whether their perceptions differ based on their demographic information, educational background and the type of HE they work for. Although EFL instructors at the preparatory programs express their acceptance of *Andragogy* and highlight the importance of *Process Design Elements* in the PDAs, no significant difference is found in their perceptions by gender, age, or years of experience in ELT and HE. On the other hand, EFL instructors' perceptions differ based on the type of Master's Degree they hold and the type of HE they work for. Specifically, EFL instructors with a Master's Degree in English language have a positive perception regarding consideration given to their *Readiness* to learn as opposed to the ones with a Master's Degree in other fields. Similarly, instructors with a Master's Degree in TEFL or English language hold more positive perceptions concerning their active contribution to the *Designing learning experiences*, unlike the ones with a master's in other fields. Finally, in contrast to instructors at state universities, perceptions are more positive in

foundation universities concerning consideration given to *Adult Learning Principles*- except for *Motivation*- and *Process Design Elements*.

Adult Learning Principles

The current study shows EFL instructors' agreement with the consideration given to *Adult Learning Principles* in the PDAs offered to them. However, instructors' perceptions differ based on the type of Master's Degree they hold and the type of HE they work for. Specifically, EFL instructors with a Master's degree in other fields are less content with the consideration given to their *Readiness* compared to the ones with a Master's in the English language. Additionally, instructors' perceptions in foundation universities are more positive for the consideration given to *Self-directedness*, *Need to know*, *Prior experience*, and *Readiness*, which will be further discussed.

Self-directedness

Overall, EFL instructors' perceptions regarding *Self-directedness* indicate a positive attitude toward taking ownership of their professional development in relation to understanding the benefits of PDAs. However, there is potential to enhance their self-directedness by fostering a more active and participatory learning environment:

- They strongly agree that they know why the learning experiences in PDAs in their institution would be beneficial to their growth.
- They are moderately satisfied with their level of active participation in PDAs, but they suggest more teacher involvement in planning and consideration of context and relevancy of the PDAs;

- They feel they have a moderate degree of control over their learning experiences during PDAs, showing they have agency in their learning but still prefer to have a more bottom-up approach in the PDAs.

The responses to the open-ended questions concerning the principle of *Self-direction* reemphasize the importance of autonomy and suggest consideration of the following:

- **Autonomy:** Acknowledge instructors' need to be capable of steering their learning depending on individual and situational differences so that they can develop a sense of ownership. Encourage self-direction via online platforms where they can find relevant PD activities.
- **Bottom-up approach:** Involve instructors in planning PDAs to ensure that PDAs align with their needs and backgrounds.
- **Context and relevance:** Ensure that PDAs are closely aligned with the realities of the classroom and the school environment. Be mindful of instructors' workload, time constraints and dependency when planning PD activities.

Overall, the responses display that the demand for *Self-direction* stems from the diverse backgrounds and needs of instructors and necessitates a bottom-up approach which allows room for more diverse PDA formats, considering individual, and contextual differences.

These findings are also in line with the self-concept of the adult learner in literature and their need to be seen as capable of self-direction as suggested by Knowles et al. (2020). In the same vein, showing the characteristics of self-directedness, adults become aware of their autonomy during learning and develop ownership (Brookfield, 1986). Additionally, as proposed by Grow (1991), *Self-direction* is situational and a different facilitator role depending on the learners' stage

is often required. Likewise, Garrison's model acknowledges other dimensions of self-direction "self-management (control); motivation (entering task); and self-monitoring (responsibility)" (1997, p.1). Self-direction, also described as "messy", is hard to define as it reflects the "complexity" of human nature (Grow, 1991, p.128). In Türkiye, studies confirm the complexity of self-direction and highlight the adults' need for *Self-direction* in their learning experiences. For instance, Yurtsever's (2013) study proposes that the multiple needs of the instructors could only be met by allowing self-direction and fostering autonomy. In other words, instructors as adult learners need to be given a voice and choice in setting their professional development objectives. Similarly, other studies highlight the importance of the bottom-up approach in planning as it increases motivation and ownership of the learning experience (Gültekin, 2007; Kırmav, 2019; Onkol, 2011; Sentuna, 2002). In the same vein, the study by Arıcı (2019), Başar (2023) and Hamamcıoğlu (2023) advocate that instructor-driven PD designs may contribute to instructors more as they have more agency in their learning.

In this study, the results indicate no difference in instructors' perceptions based on their demographic features, but their perceptions diverge based on the type of HE they work for. Regarding the demographic features of instructors, similar findings could be found in the literature (Edward, 2021; Hamamcıoğlu, 2023). These findings are also quite parallel to the literature as it is unrealistic to accept adults as self-directed and autonomous all the time (Brookfield, 1986; Houle, 1961; Knowles et al., 2020; Merriam et al., 2007; Tough, 1979). Like all adult learning principles, the self-concept of the learner may depend on individual, and situational differences and the goal of the learning (Brockett & Hiemstra, 1991; Candy, 1991; Grow, 1991; Knowles et al., 2020; Mocker & Spear, 1982; Pratt,

1998). Despite the dynamic interaction of numerous factors in self-direction, this study highlights a difference in EFL instructors' perceptions based on the type of HE they work for. Specifically, EFL instructors' perceptions in foundation universities are more positive regarding the consideration given to *Self-directedness*. Similarly, the study by Yurtsever (2013) and study by Başar (2023) highlight the instructors' need to steer their learning in state universities. Parallel to the findings of this study, the study by Başar (2013) reports a lack of flexibility in PD designs and this makes instructors seek out their resources. Finally, Ayar's study (2019) shows that instructors at state universities have less autonomy in PD designs compared to the ones in the foundation. Based on these findings, this study highlights the need for more room for *Self-direction* especially in state universities.

Need to Know

Overall, regardless of demographic factors, EFL instructors rate the principle of *Need to know* highest while their perceptions differ based on the type of HE they work for. Thus, there might be some room for improvement in clarifying work-related issues that motivate participation in PDAs. To them,

- it is clear why they need to participate in PDAs, indicating most instructors understand the importance and purpose of their participation in PDAs;
- they feel responsible for their own learning during PDAs, indicating a strong sense of ownership in professional development;
- they believe the work issues motivating their learning experiences are understood but there is room for improvement;
- they feel they have a role to play in their own learning during PDAs, reflecting a high level of agency in professional development.

As for the open-ended responses of the EFL instructors in relation to the principle of *Need to know*, they suggest the inclusion and exploration of the following:

- **Autonomy and flexibility:** Provide instructors with the freedom to choose PDAs that align with their individual needs and interests, which may include online courses, webinars, and other flexible learning options that they can assess independently.
- **Needs assessment and tailor-made PDAs:** Conduct regular needs assessments to identify specific areas where instructors require support. Design PDAs that are tailored to address these identified needs, taking into account the unique experiences and backgrounds of the instructors.
- **Bottom-up approach:** Involve instructors in the planning and decision-making process for PDAs. Gather input from instructors to ensure PDAs are customised to their specific needs.
- **Moderation and mutual planning:** Schedule PDAs in a balanced manner to prevent overload; foster collaborative planning with instructors at the institutional level to align institutional goals and instructors' professional development needs; promote continuous support and encouragement to promote a culture of professional growth and development.

These findings are parallel to literature in that “the core principle that adults *Need to know* why before they engage in learning has led to a now generally accepted premise that adults should be engaged in the collaborative planning process before their learning” (Knowles et al., 2020, p. 167). The importance of fulfilling adults’ *Need to know* has also been studied in the literature. For instance, a study by Tannenbaum et al. (1991) focuses on how the learning experience is conducted

within andragogy and examines to what extent learners' needs are met. The findings of the study by Tannenbaum et al. (1991) demonstrate positive results of mutual planning on commitment and motivation. As for *the Need to know what to learn*, studies by Baldwin et al. (1991) and Hicks and Klimoski, (1987) reveal that participants have a higher commitment to learning and display higher satisfaction when involved in what to learn. Similarly, the findings of the study by Jasso (2018) show that instructors' satisfaction with the course is related to the consideration given to their *Need to know why, what and how* to learn in a coaching program. In the same vein, Houston's (2016) study suggests that veteran instructors either need to be engaged in the planning of PDAs or find the trainer credible enough to facilitate the learning. Finally, participants in this study report their agreement with why to learn, which is also highlighted in the literature as knowing the purpose of learning allows adults to have a sense of choice and control over educational endeavours (Clark et al., 1993; Knowles et al., 2020; Reber & Wallin, 1984). Similarly, according to Knowles et al. (2020), this allows adults to see the discrepancies between their performance and objectives, and institutions may consider incorporating appraisal meetings, work rotation, or exposure to role models in their PDAs to this end.

Another finding of this study is the difference in instructors' perceptions based on the type of HE they work for. As for consideration given to instructors' *Need to know*, instructors at the state universities are less content as opposed to the ones in foundation universities. Similar findings could be observed in the study by Arıcı (2019), Ayar (2019), Başar (2023) and Yurtsever (2013) in that instructors' *Need to know* is often overlooked in PD designs in state universities and a bottom-up approach involving needs analysis is highlighted.

Readiness

Overall, participants feel somewhat prepared and receptive to PDAs, but may not be entirely enthusiastic or convinced of their effectiveness. They moderately believe

- they understand why the learning methods used in PDAs are right for them, indicating a common consensus among participants;
- the work issues that motivate them for learning experiences in PDAs are respected, reflecting overall satisfaction with the relevance and the applicability of the learning experiences;
- learning experiences in PDAs are just what they need given their needs or changes in their work, but still more consideration is needed to make learning experiences more relevant;

The open-ended responses of the instructors concerning the principle of *Readiness* restate the importance of relevance and applicability in learning experiences and suggest the consideration of the following:

- **Relevance and applicability:** Integrate instructors' needs into the content of PDAs to provide more meaningful learning experiences. Ensure PDAs align with classroom reality and are applicable in real life. Address imminent problems in work or life to trigger their *Readiness* and create opportunities to polish relevant skills.
- **Based on needs:** In planning PDAs, consider instructors' imminent needs, life conditions, and context, which impact their *Readiness* to learn. Closer observation and mutual planning could help identify the specific needs of these instructors while contributing to institutional growth.

- Timing: Offer the PDAs based on instructors' *Readiness* to provide relevant assistance. Pre-set PDAs may be found irrelevant and may cause less interest in them. Instead, flexible and timely assistance during transition periods or changes will be valued by instructors.
- Different stages of career: Consider the dependency of the instructors in the learning experience. Instructors' *Readiness* could vary based on prior experience or career stage. Allow room for flexibility in designs to address instructors' needs at the different stages of careers.

The findings related to *Readiness* are parallel to the ones in the literature. For instance, Knowles (1980) claims that adults feel ready to learn when they confront problems. This is also emphasized in Houston's (2016) study, participants perceive the PDAs as most meaningful when they find the learning experience relevant to work-related needs.

The moderate agreement on the consideration given to *Readiness* in this study is also evident in other studies in Türkiye. According to the report by the British Council & TEPAV (2015), even though more than three-quarters of EFL instructors participated in CPD events at the tertiary level in 2014 in Türkiye, they were not regarded as useful since they failed to meet instructors' needs. Similarly, the study by Arıcı (2019) shows that instructors are unsure of the applicability and the relevancy of the PDs offered to them and they are in need for PDAs to address everyday problems in their classes. Likewise, the study by Ayar (2019) reports that instructors are not sure of the applicability and relevance of the PDAs especially in state universities.

In this study, there is a difference in instructors' perceptions related to *Readiness* based on the type of Master's Degree they hold and the type of HE they

work for. Specifically, instructors with a Master's Degree in the English language are more content with the consideration given to their *Readiness* as opposed to the ones with a Master's Degree in other fields. This finding shows that institutions consider the relevancy and applicability of the learning experiences related to the field, but adapting multidisciplinary approaches to PDAs could enhance the *Readiness* of instructors with degrees in other fields. Also, the report by the British Council & TEPAV (2015) suggests there is a need for training for EAP and ESP in the EMI context, and instructors with Master's in other fields and their expertise could be exploited for institutional growth. Leveraging the expertise of instructors could result in more relevant PDAs for individuals and contribute to institutional growth in addressing the need for EAP and ESP training.

As for the type of HE, the findings of this study both concur and contradict the earlier studies in Türkiye. In this study, EFL instructors' perceptions in foundation universities are more positive regarding consideration given to their *Readiness* as opposed to the ones in the state. Similarly, the study by Ayar (2019) reports that EFL instructors at the foundation universities perceive the PDAs as relevant and applicable to their needs. However, it is possible to find studies reporting the irrelevancy of the PDAs to the needs of the instructors at foundation universities (Irgatoğlu, 2018; Kabadağı, 2013). These contradictory results validate the diverse practices in different institutions as suggested by Irgatoğlu (2018). These findings also concur with the literature that adults' *Readiness* may change based on various factors. To illustrate, Pratt's (1988) research shows that adults' readiness is likely to change based on the dependency of the learner and context.

In summary, both the previously mentioned and the current study show the confronted issues in adults' context and providing relevant assistance based on their

dependency can trigger *Readiness* in adults. For that reason, adult educators should provide support to surface the needs by working on real-life problems in their context (Knowles et al., 2020).

Prior Experience

Overall, regardless of demographic factors, EFL instructors strongly value their prior work experiences, suggesting the importance of designing PDAs that build upon participants' existing knowledge and skills. To them,

- their prior work experiences help their learning; suggesting their earlier experiences function as a source for learning;
- their work experiences are a regular part of learning experiences in PDAs, with the highest variability in their answers, which could be due to various practices in different institutions;
- their work experiences are a resource for PDAs, showing their earlier experience is catered for the PDAs.

Concerning the principle of *Prior experience*, responses of EFL instructors highlight the importance and exploration of the following:

- Prior experience as facilitator: Use earlier experiences of instructors to ease their learning process and motivate them. Anchor the PDAs on the prior experience of instructors to make it relevant.
- Room for reflectivity: Incorporate the earlier experiences of instructors into the PDAs using reflective means such as observation, team teaching, mentoring or action research.

These findings are parallel to the literature that earlier experiences of adults influence how they learn and could serve as a rich repertoire or function as filters (Argyris, 1982; Knowles et al., 2020; Schön, 1987). It is also concluded in the study

by Edwards (2021) that previous learning experiences should be used to pave the way for new learning experiences. On the other hand, earlier experiences are not perceived as barriers to learning in this study. This contradicts the literature which suggests the earlier experiences of adults could also inhibit learning (Knowles et al., 2020; Schön, 1987). In literature, it is possible to find studies validating this. For instance, the study by Wilson (2005) shows that accumulated earlier experience may cause resistance to embracing new concepts, suggesting the time gap away from school may increase learners' expectations and lead to dissatisfaction with the trainer. Likewise, in the study by Houston (2016) senior teachers report that they seek learning experiences that consider their career stage, and earlier experience and mostly benefit from collegial discussions. However, the cases where prior experience inhibits instructors' learning are not found in this study. One reason for this could be that participants' earlier schemas fit the new learning experiences and they could handle work-related tasks automatically, as Argyris suggests (1982). Alternatively, the instances where earlier schemata do not suffice are not reported.

Finally, this study reveals a difference in EFL instructors' perceptions based on the type of HE they work for. Instructors at the foundation universities are more positive as to consideration given to *Prior experience* in the design of the PDAs. This could be explained due to the type of PDAs offered to instructors in these two different contexts. The responses of the instructors show that foundation universities allow more opportunities for reflective practice through team-teaching and observation while state universities mostly rely on transmissive means such as seminars and webinars. These reflective means probably allow instructors to ground their learning on the PD experience and help them relate it to their authentic context while allowing experimenting. This finding is also supported in the literature by

Savery and Duffy (1996). In their terms, learning can be meaningful when it is related to problems, anchored in its context, and allows room for experimentation. In line with this constructivist approach, andragogy also advocates the importance of prior experience and its integration into learning (Knowles et al., 2020). Similarly, several studies in Türkiye advocate that learning experiences should be based on the experiences of the instructors without decontextualizing them (Arıcı, 2019; Kımav, 2019; Sentuna, 2002; Yurtsever, 2013).

Motivation

Overall, regardless of demographic factors, EFL instructors generally express a positive towards the principle of *Motivation*. However, there are areas where the perceived impact is slightly lower, suggesting opportunities for improvement in the design and delivery of PDAs. Except for their strong tendency towards perceiving the beneficial aspects of mastering PDAs, participants moderately agree that:

- PDAs improve their ability perform work-related tasks;
- experiences in PDAs, suggesting increased motivation following the PDAs as they can cope with work-related issues better;
- knowledge gained in learning experiences in PDAs can be immediately applied to their work, but there is room for improvement;
- learning experiences in PDAs tap their inner drive to learn, indicating their intrinsic drive to learning;
- they feel learning experiences in PDAs will assist them in resolving a work-related problem;
- learning experiences in PDAs motivate them to give their best effort;
- they feel that learning experiences in PDAs will make a difference in their work;

- learning experiences in PDAs motivate them to learn more.

Concerning the principle of *Motivation*, the open-ended responses of the EFL instructors highlight the significance and exploration of the following while restating the importance of intrinsic value and personal payoff.

- Intrinsic value: Recognize the internal motivation of the instructors and cultivate the feeling of success, ownership, and enjoyment in the PDAs. Increase the ownership by mutual planning, recognize the success and encourage voluntary participation.
- Personal payoff: Consider instructors' needs and ensure the learning experience has a personal significance in their lives. Provide support that will enhance their performance and result in appreciation.
- Different stages of career: Explore the reasons for lower motivation in different stages of career and address them individually. Provide opportunities for experienced instructors to mentor or lead PD sessions, leveraging their experience to benefit those who are less experienced.

These findings are in line with adults' intrinsic motivation to learn within andragogy (Knowles et al., 2020) in that internal variables are more powerful motivators for adults than external ones. Additionally, adults are motivated to engage in learning when it has a personal meaning, and their motivation rises when learning solves a "problem in life or its payoff" (Knowles et al., 1998, p. 149). Likewise, Wlodkowski (1985) explains that "adult motivation operates on integrated levels, with multiple feelings and thoughts occurring simultaneously" [and, this includes] "success, volition, value, and enjoyment" (Wlodkowski, 1985, p.100). He describes these factors as experiencing success as a learner, having a sense of autonomy in the learning process, perceiving the learning as valuable, and finding the learning

enjoyable. Likewise, the expectancy theory (Vroom, 1995) states that adults are motivated when they have confidence in their potential success (*expectancy*), perceive that the learning process will benefit them (*instrumentality*), and be worthwhile (*valence*). More recent studies yield similar results. For instance, Wilson's (2005) study reveals that the more relevant the learning experience is for adults, the more motivated and satisfied they are. In other studies, the motivational orientations of adults for self-growth are also reported to be significant (Houston, 2016; Onkol, 2011). In the same vein, adults are motivated by coaching practice because of the relevance and the applicability of the learning experiences in the study by Jasso (2018).

The perceptions of instructors do not differ based on any of the variables in the study, but still, some participants report losing their motivation to participate in PDAs after years of teaching. There are also other studies parallel to this finding, suggesting instructors' interest and motivation for PDAs decrease as they become more experienced (Ayar, 2019; Ekşi, 2010; Sentuna, 2002).

Process Design Elements

Participants in this study have more neutral perceptions of *Process Design Elements* compared to *Adult Learning Principles*. Specifically, perceptions of the instructors regarding *Preparing the learner*, *Climate setting* and *Setting objectives* are more positive compared to *Designing learning experiences*, *Learning activities*, and *the Evaluation of learning* with higher variability. As stated by Knowles et al., to address adult learners' needs, their active involvement in PDA designs is crucial due to their need to know, self-concept, earlier experience, readiness and motivation. To this end, the incorporation of the *Process Design Elements* ensures the way they are

prepared for the learning experience, climate and objectives set, designed learning experiences and activities and evaluation of learning are appropriate (Knowles et al., 2020). Studies in Türkiye also concur with the need for the active involvement of participants in the design of PDAs (Atay et al., 2017; Başar, 2023; Onkol, 2011).

In this study, no difference is observed in instructors' perceptions based on gender, age, or experience, but their perceptions diverge based on the type of Master's Degree they hold for *Designing learning experiences* and they differ based on the type of HE across all the constructs. Specifically, EFL instructors with a Master's Degree in other fields need a more active role in *Designing learning experiences* compared to the ones with a Master's in their fields. To the best knowledge of the researcher, no study is found particularly based on this finding. However, as stated before the report by the British Council & TEPAV (2015) highlights the necessity for EAP and ESP training in the context of EMI. Thus, involving instructors with a Master's Degree in other subjects in the design of learning experiences related to ESP is discussed.

Additionally, EFL instructors in the foundation have a more positive perception of the consideration given to *Process Design Elements* while the ones at the state universities held a neutral stance towards them. The difference in EFL instructors' perceptions of the PDAs in each context is also observed in Ayar's study (2019). Similar findings are reported in the literature and PDAs are reported to be away from being process-oriented in state universities, and there is a discrepancy between foundation and state universities in their effectiveness (Balbay et al., 2018). Finally, diverse PD practices in different contexts and the scarcity of opportunities are reported to be a problem in the study by the British Council & TEPAV (2015).

Preparing the Learner

Overall, the results indicate that while there are some positive aspects to the preparation process, there is room for improvement. EFL instructors moderately agree or lean towards agreement with the *Process Design Element* of *Preparing the Learner*. To them,

- sufficient steps are taken moderately to prepare them for the learning process in PDAs but could benefit from enhancement, aiming for a more systematic approach;
- the clarity of responsibilities for learning experiences in PDAs is moderately appropriate; however, there is potential for improvement. Transparent expectations from instructors and the administration will ensure better outcomes;
- The preparation for learning experiences in PDAs moderately gives them the confidence they need.

The significance of *Preparing the learner* for the learning experiences is also evident in the literature. As stated by Knowles et al. (2020), this step diversifies proactive and reactive learning, satisfies adults' need to know how to learn, helps develop realistic goals, and facilitates the contribution to the learning design. In the same vein, Wilson's study (2005) highlights that *Preparing the learner* is a significant predictor of satisfaction with the instructor as expectations are explicit and understood. The study emphasizes the significance of clearly expressing course ground rules or "what's in it for me" for participants (Wilson, 2005, p.195). Similar findings are reported by Jasso (2018) in that the participants' inadequate preparation for the coaching training programme leads them to perceive it as mandatory and this affects their *Readiness*. Likewise, the study by Şahin (2006), aiming to evaluate the

effectiveness of a PD program, reports the negative responses of the instructors due to insufficient preparation concerning the aims and significance of the learning experience.

In this study, instructors' perceptions related to this construct moderately diverge only based on the type of HE they work for. The responses of EFL instructors in foundation universities are more positive regarding *Preparing the learner* as opposed to the ones in state universities. This could be attributed to the wide use of experiential PDAs such as observation and team teaching, which incorporate *Preparing the learner* during pre-observation, or in role definitions, in foundation universities. Conversely, in state universities, the common use of seminars and webinars does not require the preparation of the instructors for the learning experience, which may account for the moderate agreement of instructors at state universities. Parallel to the findings, the study by the British Council and TEPAV (2015) highlights the absence of a systematic approach to PD of instructors.

Climate Setting

Overall, EFL instructors generally express a moderate level of agreement with statements related to the *Process Design Element of Climate setting*, suggesting environment is conducive to learning. To them,

- facilitator(s), trainer(s) and participants collaborate moderately in preparing learning experiences in PDAs, but a more collaborative atmosphere could be created to ensure mutual planning and design;
- there is a moderate amount of dialogue with my facilitator(s)/trainer(s) regarding their learning needs, but closer communication to identify individual needs is necessary;

- while participants are regarded as partners with the facilitator(s)/trainer(s) in learning experiences in PDAs, but increasing cooperation could be considered;
- the climate in learning experiences in PDAs can be best described as collaborative, reflecting a positive and supportive learning environment;
- facilitator (s) /trainer(s) act as a rich resource for their learning in PDA, showing a reasonable level of satisfaction;
- facilitator(s) /trainer(s) develop a good rapport with participants in PDAs, reflecting positive perceptions of a safe, tolerant and supportive climate.

As for the open-ended responses related to climate setting, a participant states that

- Positive climate in the PDAs is transferred into classroom reality.

The study findings regarding *Climate setting* align with the literature. The findings of this study are in line with Knowles et al.'s description of a climate conducive to learning that considers physical opportunities, encouragement for active use and a psychologically healthy setting (2020). The instructors' responses in this study do not provide specific details for the physical opportunities, but they highlight the importance of the psychological climate. The results of the study are parallel to the importance attached to a safe, supportive, tolerant, trusting, and considerate climate encouraging collaboration (Knowles et al., 2020, Merriam et al., 2007). In the same vein, the study by Wilson (2005) suggests that trainers setting a collaborative and supporting environment improves learner satisfaction. Likewise, Houston (2016), Kılıç (2020) and Kımav (2019) highlight the significance of creating a learning environment where instructors can collaborate and learn from each other.

This study does not yield any results concerning the physical opportunities and encouragement for their active use, which is marked as vital by Knowles et al. (2020). The findings of the study by Şahin (2006) show that despite the presence of the necessary conditions -physical and psychological- provided by the administration, do not suffice to make a change in instructors. That is, although good conditions do not ensure learning, issues arise when these conditions are not provided. For instance, the study by Onkol (2011) reveals the instructors' dissatisfaction with the availability of technology within the school while administrators had expectations for its use.

Finally, participants' perceptions in this study differ based on the type of HE they work for. EFL instructors in the foundation universities have a more positive perception related to the learning climate, which encourages collaboration and dialogue. In the same vein, the study by Ayar (2019) concurs with this finding in that instructors in foundation universities perceive the climate as more collegial and conducive to learning. This could be due to the wide use of experiential techniques such as observation and team teaching, which require more dialogue in PDAs.

Setting Objectives

Overall, EFL instructors are moderately content with the *Process Design Element of Setting objectives* with high variability in their responses. Participants moderately agree that

- facilitator(s)/ trainer(s) and themselves negotiate when setting learning objectives in PDAs;
- they are encouraged to set their own individual learning objectives;
- facilitator(s)/ trainer(s) solicit input from participants regarding learning objectives;

- they have flexibility in designing their learning experiences, so there is room for self-direction;
- a partnership exists between themselves and facilitator(s)/ trainer(s) in setting learning objectives;
- they are encouraged to jointly design how their learning would occur in PDAs.

As for the *Setting objectives*, the open-ended responses of the EFL instructors highlight the inclusion and exploration of the following:

- Bottom-up approach: Create a system where PD objectives are set collaboratively. Encourage setting individual objectives actively and provide support by PDU members. Establish a feedback loop to design PD activities that are relevant and beneficial to the instructors, ensuring that their voices are heard and incorporated.
- Top-down approach: Balance institutional objectives with individual ones by merging them to increase the relevancy and the ownership of the learning. Ensure diverse perceptions are considered in setting objectives and involve EFL instructors with different backgrounds, PD members and administrations. Identify what benefits and motivates each teacher to ensure their engagement and motivation.

The findings are parallel to Knowles et al.'s claim in that adults become more engaged in learning when they are involved in its creation (2020). However, they show less interest in things that are irrelevant to their self-identified needs. In line with this, active learner contribution to decision-making is also found vital in the literature as it increases the feeling of ownership of the learning experience and commitment to it (Knowles, 1984; Rogers, 1951). Similar findings can be observed

in Wilson's study, in that involving learners in setting objectives increases their satisfaction with the course (2005). In the same vein, the study by Houston (2016) verifies that involving instructors in PD designs is one of the factors that affect their engagement since their real-time needs will contribute to the content and lead to increased acceptance of the program. Several studies within Türkiye are in line with this result (Atay et al., 2017; Ayar, 2019; Basar, 2023; Ekşi, 2010; Gültekin, 2007; Kımav, 2019; Onkol, 2011; Sahin, 2006; Sentuna, 2002; Tezcan, 2022 & Dewan, 2020).

This study reveals instructors' discontent in state universities with the way objectives are set as their needs are overlooked by the administration and they are not involved in setting objectives. Likewise, instructors at the foundation university report their discontent with mandatory PDAs and externally set objectives. Still, their perceptions differ based on the type of HE they work for in that EFL instructors at foundation universities display more agreement with this construct than the ones in the state. Likewise, the study by Ayar (2019), which specifically compares the perceptions of instructors in foundation and state universities, affirms that instructors at state universities are not encouraged to set their individual goals and PDAs are not aligned with their needs.

Designing Learning Experiences

Overall, EFL instructors express a moderate level of agreement with statements related to *Designing learning experiences*, showing high variability in their responses. Participants moderately agree that

- evaluation tools are used to help facilitator(s)/trainer(s) and themselves collaboratively identify learning needs;

- there are some mechanisms in place to collaboratively design which learning activities would be used, suggesting these mechanisms may consider more teacher involvement;

The open-ended responses of the EFL instructors regarding *Designing learning experiences* highlight the inclusion and exploration of the following:

- Bottom-up approach: Create mechanisms involving instructors in *Designing learning experiences*. Encourage instructors to propose topics, lead sessions, or share expertise. Establish a systematic feedback loop to identify instructors' needs and design learning experiences accordingly.
- Moderation: Conduct shorter PDAs regularly to increase instructors' motivation, instead of causing overload at the beginning or end of the year. Between formal PDAs, conduct check-in and out meetings, which can trigger a continuous reflection on the progress and the needs.

The findings of this study are in line with the literature. One-to-one meetings, personalized formats and sequencing the learning experiences are underscored by Knowles (1968), Houle (1972) and Tough (1971). Similarly, the study by Houston (2016) reveals the importance of teacher involvement in the design of PDAs. The importance of instructors' involvement in designing learning experiences is also concluded in studies in Turkiye as it leads to an autonomous, inclusive, and conducive environment (Dewan, 2020; Onkol, 2011).

In addition to the results mentioned above, the study shows that EFL instructors with a Master's Degree in other fields feel less involved in *Designing learning experiences*. Therefore, it may be possible to enhance institutional growth by utilizing the experience of teachers who hold master's degrees in other subjects. By addressing the need for EAP and ESP training as suggested by the British

Council & TEPAV report (2015) and involving these instructors in the design of learning experiences, PDAs could become more relevant for individuals and ultimately aid in the growth of the institution. To this end, one-to-one meetings, and needs analysis could be conducted to meet the specific needs of each context.

Also, in this study, EFL instructors in state universities need more voice in *Designing learning experiences* in PDAs while instructors in foundation universities hold a more positive perception. As for the perceptions of instructors at state universities, this study underscores the need for continuity in PDAs and a closer negotiation in the design of learning experiences. Similar findings regarding state universities could be observed in the study by Başar (2023) and Yurtsever (2018). However, the findings related to the perceptions of instructors at foundation universities are contradictory. For example, some studies report positive perceptions of instructors regarding their active role in the design of the learning experiences in foundation (Dewan, 2020; Onkol, 2011) while the study by Balbay et al. (2018) and Irgatoğlu (2018) PDAs are reported to be far from being process-oriented and their effectiveness needs to be monitored more closely in both foundation and state universities.

Learning Activities

Overall, EFL instructors lean towards disagreement in relation to the statement related to the *Learning activities* within *Process Design Elements*. Participants moderately disagree that

- facilitator(s)/trainer(s) rely too heavily on lectures in PDAs, reflecting a variety of perceptions, which could be due to differences in the type of *Learning activities* offered;

- the way learning experiences in PDAs are conducted makes participants passive learners. This reflects that they may not be content with the way the PDAs are conducted or PDAs could be more active and engaging.

Regarding open responses to *Learning activities*, a teacher reports the following suggestion:

- Ensure variety and active participation: Provide rich alternatives from which instructors can choose depending on their needs, dependencies or constraints. Ensure experiential techniques that allow active participation.

Similar conclusions are reached in the literature and “the emphasis in adult education is on experiential techniques - techniques that tap into the experience of the learners, such as group discussions, simulation exercises, problem-solving activities, case methods, and laboratory methods instead of transmittal techniques” (Knowles et al., 2005, p. 66). It is also possible to find several studies that are in line with this result. For instance, the study by Houstin (2016) evidences that instructors prefer experiential techniques as opposed to lectures, and they are more engaged in hands-on practice. Similar findings are also found in Türkiye, suggesting the usefulness of experiential techniques and reflective practices over transmissive ones (Başar, 2023; Dikilitas, 2018). In the same vein, Balbay et al. (2018) report the widespread theory-based approach and no variety in PDAs at the tertiary level.

On the other hand, it is not feasible to assume that adults prefer to engage in experiential learning activities as they may be dependent on the facilitator due to time constraints or lack of prior knowledge (Knowles et al., 2020; Pratt, 1998). Therefore, instructors’ neutral answers may indicate only the type of *Learning activities* offered to them.

As for the variety of the responses, this study shows that instructors' perceptions of learning activities differ in foundation and state universities in that in the latter participants feel more receptive and less active. The study also finds that the most common type of PDAs are workshops, which is also highlighted in several studies (Güçlü, 2018; Korkmazgil & Seferoğlu, 2015). The other common types of PDAs are team teaching and observation in foundation universities whereas they are seminars and webinars in state universities. In other words, more experiential techniques are conducted in foundation universities as opposed to transmissive ones. Similar results are found in the study by Balbay et al. (2018), suggesting the integration of experiential techniques.

Evaluation of Learning

Overall, EFL instructors express a moderate level of agreement with statements related to the *Evaluation of learning* with high variability in their responses. Participants moderately agree that

- the methods used to evaluate their learning in PDAs are appropriate, reflecting either the absence of evaluative methods or the inappropriateness of them;
- evaluation methods used in PDAs meet their needs, suggesting that they need to be enhanced;
- evaluation methods help them diagnose their needs for further learning, indicating more need for formative feedback to contribute to instructors' future learning;

Open-ended responses are also in line with the results of the items in the survey.

Instructors in this study report and suggest the following:

- Need for an evaluative system: Provide an evaluation system in state universities to ensure instructors' participation in planning, designing and evaluation of learning.
- Formative feedback: Allow instructors to evaluate themselves to make progress and identify their future needs. Hold regular meetings to shape learning experiences.

As evident in the literature, adults' needs change in different situations and over time; therefore, creating conditions that allow learners to reassess their goals and address any discrepancies is critical (Knowles et al., 2020). Building dynamic systems to evaluate learning when working with adults has been advocated by several researchers (Brookfield, 1984; Henscke, 2013; Kirkpatrick, 1998).

While Brookfield (1984) suggests using multiple lenses- autobiographical- collegial-learners- theoretical- allows learners to reevaluate their needs, Henschke (2014) emphasizes the importance of self-evaluation backed up with evidence validated by colleagues, facilitators, and experts. In this study, however, the findings show that there is no evaluation of learning in state universities and instructors in foundation universities are content with the evaluation system in place. As for state universities, similar findings are observed in the study by Balbay et al. (2018) in that there needs to be an improvement in the evaluation of learning and effectiveness of the training in state universities. Likewise, the study by Ayar (2019) reports that state universities either do not have an evaluation of learning or rely on only administration for the evaluation of learning. Parallel to this, Ekşi (2010) and Şahin (2006) show that instructors at state universities need to be involved in evaluating their learning by reflecting on their teaching experiences.

While there is no system for the evaluation of learning at state universities, instructors at the foundation report benefiting from the evaluation process. Other research both agrees and contradicts these findings. For instance, Ayar (2019) reports positive perceptions of stakeholders in foundation universities but ultimately reports no effective systems in the evaluation of learning among participating universities.

Implications for Practice

Based on the study's findings, some recommendations can be made within *Adult Learning Principles*. As the findings suggest, more consideration could be given to instructors' need for *Self-Direction*, their *Need to Know* and *Readiness*. To this end, it is possible to facilitate closer negotiation to pinpoint individual needs that align with institutional ones. To manage these, regular meetings and needs analyses could be conducted to address their *Need to Know* why, what, and how to learn while appraising *self-directedness* and leveraging the diverse qualifications of instructors. These meetings could also serve as a springboard for further learning and development. To anchor learning experiences onto *Prior Experience* and trigger *Readiness* to learn, PDAs that include reflective practices, such as observation, mentoring and team teaching could be employed to provide individualized support whilst contributing to institutional growth. Contextualizing the learning in a positive climate will also result in more relevant and applicable learning experiences. As for *Motivation*, developing a sense of success and ownership of learning seems essential and this could be achieved by differentiating PDAs based on years of experience in the field or background or by encouraging voluntary participation.

Regarding *Process Design Elements*, there is a need for a bottom-up, process-oriented approach in PD designs, especially in state universities' preparatory programs. This approach could include the necessary elements before, during and

post learning. First, *to Prepare the learner* for the learning experience, transparent and supportive meetings could be conducted. These meetings would enable instructors to develop realistic expectations and start to consider their needs, which also satisfies adult learners' need to understand how to learn. *Setting a climate* for the learning experience is also essential to ensure essential physical and psychological conditions. Individuals should be encouraged to contribute to the climate to cultivate their sense of ownership. Additionally, this supportive and trusting climate should be supported by the administration through ceremonies or acknowledgements. In *Setting objectives* and *Designing learning experiences*, ensuring systems that involve more dialogue and a constant feedback loop seem crucial. In this regard, *Designing learning experiences* and *activities* could include reflective practices like action research, observation, or team teaching. Integration of reflective practices in PD will allow instructors to anchor learning to their context and needs, set their objectives accordingly, and design their own learning experiences. These practices will also create room for reflection and self-evaluation of the learning experiences. Also, setting objectives, learning experiences and activities need to be conducted in moderation based on needs, readiness and be voluntary. Providing a wide array of choices will also increase *Self-direction* and *Motivation*. Finally, for the *Evaluation of Learning*, portfolio or appraisal systems including self-reflection could be implemented. Additionally, gathering feedback from various channels- learners, administration, facilitator and self-reports will yield more reliable results for reidentifying the needs.

Implications for Further Research

In light of the findings of the current study, some recommendations could be given for further research on *Adult Learning Principles* and *Process Design Elements*.

Within *Adult Learning Principles*, it is possible to find research related to *Self-directedness* and factors influencing learners' self-direction. However, institutional practices in different contexts considering self-directedness could be explored. Likewise, learners' *Need to know* what, why and how to learn is widely accepted in the literature; therefore, more research could be conducted on how to satisfy these needs on three levels in different contexts. In this study, the benefits of *Prior experience* in learning were reported but how instructors' *Prior experiences* could cause bias and resistance to learning may be further studied. Also, the *Motivation* and *Readiness* of instructors at the different stages of their careers within andragogy could be explored. Finally, the Master's opportunities provided to the EFL instructors, the reasons for different choices and their implications could be examined to address the PD needs in higher education.

There are relatively fewer studies concerning the *Process Design Elements* probably due to a lower need to test the importance of these elements in learning. However, exemplary practices of PD systems in some foundation universities could be examined to pave the way for a national system without a one-size-fits-all treatment. That is, despite common challenges and opportunities, the dynamic nature of *andragogy* needs to be considered in future research. Also, the perceptions of the other stakeholders like administrators or trainers could be examined to investigate if they match those of the instructors. Finally, it is possible to conduct the same study in an experiential design to examine if applying *Adult Learning Principles* and

Process Design Elements in PD activities affects instructors' satisfaction or development.

Limitations

The findings of this study have to be seen in light of some limitations. First, this study employed a cross-sectional survey design to get the general perceptions of a large sample. Therefore, the perceptions of participants were limited to a specific time and region. Additionally, it depends on self-reported data. Therefore, the same research could be conducted with longitudinal data enriched with more qualitative methods, including perspectives from other stakeholders. Furthermore, replicating the same study in different contexts, cities and regions could provide additional insights. Finally, practices concerning *Process Design Elements*, such as *Evaluating learning* experiences, may vary across contexts. Therefore, items measuring instructors' perception of the evaluation of learning experiences may mean different things in different contexts. Future studies should consider these factors and might benefit from more qualitative methods to examine the differences.

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Appendix A

Informed Consent Form

Dear Participants/Colleagues,

You are invited to participate in a study about “Role of Andragogy in Professional Development as Perceived by EFL Teachers in Higher Education Context” that I am conducting as a part of a Master’s Program in Teaching English as a Foreign Language at İhsan Doğramacı Bilkent University. Please read the following information before you agree to participate in this study (approved by the Bilkent University Ethics Committee on the 24th May, 2022).

The study intends to use a questionnaire (adapted from Wilson, 2005*) with the purpose of examining how EFL instructors in higher education context perceive their learning experiences in professional development activities (PDAs) within the context of principles, and design and delivery, of andragogy. It also aims to investigate whether EFL teachers’ perceptions in relation to *Andragogical Principles, and Process Design Elements* in PDAs differ on the basis of gender, age, years of experience, educational background, type of professional development, and type of university they are working.

Participation in this study is voluntary, and you have the right to withdraw from the study at any time for any reason. Your participation will be valuable to increase understanding of how the andragogical principles, and design elements, are perceived by EFL instructors in higher education context.

If you choose to participate, your answers will be anonymous and your responses, or any other identifying information, including your university, will not be shared. Only the researchers in this study will have access to the information you share, and any data will be kept on a password-protected laptop. Your responses will only be used

for conducting and disseminating research.

Duration: It should take about 15 minutes to complete the questionnaire.

Thank you very much for your time and participation.

Name: Harika Tuncer

Program: MA in TEFL, Graduate School of Education, Bilkent University

Thesis Advisor: Asst. Dr. Necmi Akşit



Appendix B

Questionnaire

You will find below a questionnaire with two parts: Part 1 contains demographic questions, and Part 2 consists of two sections including statements about the andragogical principles, and process design elements.

PART I: Participant Profile

Please choose the option that best represents your personal information.

1. Gender
 - ☐ Female
 - ☐ Male
 - ☐ Prefer not to answer
2. Age Range
 - ☐ 21-25
 - ☐ 26-30
 - ☐ 31-40
 - ☐ 41-49
 - ☐ 50+
3. Total years of ELT teaching experience
 - ☐ 0-5
 - ☐ 6-10
 - ☐ 11-15
 - ☐ 16-24
 - ☐ 25+
4. Years of ELT teaching experience in higher education context
 - ☐ 0-5
 - ☐ 6-10
 - ☐ 11-15
 - ☐ 16-24
 - ☐ 25+
5. I have a Bachelor's degree in
 - ☐ Teaching English as a Foreign Language
 - ☐ American Culture and Literature
 - ☐ English Language and Literature
 - ☐ English Translation and Interpreting

- ☐ English Linguistics
- ☐ Other (Please specify) _____
6. I have a Master's degree in [(select any choice(s) applicable):
- ☐ I do not hold a postgraduate degree.
- ☐ English Language Teaching
- ☐ American Culture and Literature
- ☐ English Language and Literature
- ☐ English Translation and Interpreting
- ☐ English Linguistics
- ☐ Other (Please specify) _____
7. I have a Doctorate's degree in [(select any choice(s) applicable):
- ☐ I do not hold a postgraduate degree.
- ☐ English Language Teaching
- ☐ American Culture and Literature
- ☐ English Language and Literature
- ☐ English Translation and Interpreting
- ☐ English Linguistics
- ☐ Other (Please specify) _____
8. Other certification(s) I've got [(select any choice(s) applicable):
- ☐ CELTA
- ☐ ICALT
- ☐ DELTA
- ☐ TESOL
- ☐ Other (Please specify) _____
9. Type of higher education institution I work:
- ☐ state
- ☐ research state
- ☐ foundation
10. Select the type(s) of professional development activities offered to you in your institution.
- ☐ Observation
- ☐ Team teaching
- ☐ Workshop
- ☐ Action research
- ☐ Seminar
- ☐ Panel
- ☐ Mentoring
- ☐ Webinar
- ☐ Other (Please specify) _____

PART II: Adult Learning Principles/Design Elements Questionnaire
(adapted* by the researcher)

Section 1

The statements in Section 1 are about your perceptions of your learning experiences in Professional Development Activities (PDAs) offered in your **current** institution.

Please mark the response to each statement that most nearly represents YOUR PERCEPTIONS.

		(1) Strongly Disagree	(2) Disagree	(3) Neither Agree or Disagree	(4) Agree	(5) Strongly Agree
1.	I know why learning experiences in Professional Development Activities (PDAs) in my institution would be beneficial to me.	(1)	(2)	(3)	(4)	(5)
2.	I am satisfied with the extent to which I am an active partner in learning experiences in PDAs.	(1)	(2)	(3)	(4)	(5)
3.	I feel that I have control over my learning experiences during PDAs.	(1)	(2)	(3)	(4)	(5)
4.	It is clear to me why I need to participate in PDAs.	(1)	(2)	(3)	(4)	(5)
5.	I feel responsible for my own learning during PDAs.	(1)	(2)	(3)	(4)	(5)
6.	The work issues that motivate me for learning experiences in PDAs are understood.	(1)	(2)	(3)	(4)	(5)

7.	I feel I have a role to play in my own learning during PDAs.	(1)	(2)	(3)	(4)	(5)
8.	I understand why the learning methods used in PDAs are right for me.	(1)	(2)	(3)	(4)	(5)
9.	The work issues that motivate me for learning experiences in PDAs are respected.	(1)	(2)	(3)	(4)	(5)
10.	Learning experiences in PDAs are just what I need given my needs or changes in my work.	(1)	(2)	(3)	(4)	(5)
11.	I feel my prior work experiences help my learning.	(1)	(2)	(3)	(4)	(5)
12.	My work experiences are a regular part of learning experiences in PDAs.	(1)	(2)	(3)	(4)	(5)
13.	I feel better able to perform work-related tasks due to learning experiences in PDAs.	(1)	(2)	(3)	(4)	(5)
14.	I feel that mastery of PDAs will benefit my work.	(1)	(2)	(3)	(4)	(5)
15.	Knowledge gained in learning experiences in PDAs can be immediately applied to my work.	(1)	(2)	(3)	(4)	(5)
16.	I feel my work experiences are a resource for PDAs.	(1)	(2)	(3)	(4)	(5)

17.	Learning experiences in PDAs tap my inner drive to learn.	(1)	(2)	(3)	(4)	(5)
18.	I feel learning experiences in PDAs will assist me in resolving a work-related problem.	(1)	(2)	(3)	(4)	(5)
19.	Learning experiences in PDAs motivate me to give my best effort.	(1)	(2)	(3)	(4)	(5)
20.	I feel that learning experiences in PDAs will make a difference in my work.	(1)	(2)	(3)	(4)	(5)
21.	Learning experiences in PDAs motivate me to learn more.	(1)	(2)	(3)	(4)	(5)

If you have any other comments, please add them here.

Section 2

The statements in Section 2 are about your perceptions in relation to the design and delivery of Professional Development Activities (PDAs) in your **current** institution.

Please mark the response to each statement that most nearly represents YOUR PERCEPTIONS.

		(1) Strongly disagree	(2) Disagree	(3) Neither Agree or Disagree	(4) Agree	(5) Strongly Agree
1.	Sufficient steps are taken to prepare me for the learning process in PDAs.	(1)	(2)	(3)	(4)	(5)
2.	The way my responsibilities are clarified is appropriate for learning experiences in PDAs.	(1)	(2)	(3)	(4)	(5)
3.	The way I am prepared for learning experiences in PDAs gives me the confidence I need.	(1)	(2)	(3)	(4)	(5)
4.	The facilitator(s)/trainer(s) and I work together to prepare me for learning experiences in PDAs.	(1)	(2)	(3)	(4)	(5)
5.	There is an adequate amount of dialogue with my facilitator(s)/trainer(s) regarding my learning needs.	(1)	(2)	(3)	(4)	(5)
6.	Participants are full partners with the facilitator(s)/trainer(s) in	(1)	(2)	(3)	(4)	(5)

	learning experiences in PDAs.					
7.	The climate in learning experiences in PDAs can be best described as collaborative.	(1)	(2)	(3)	(4)	(5)
8.	The facilitator(s)/trainer(s) act as a rich resource for my learning in PDAs.	(1)	(2)	(3)	(4)	(5)
9.	The facilitator(s)/trainer(s) develop good rapport with participants in PDAs.	(1)	(2)	(3)	(4)	(5)
10.	The facilitator(s)/trainer(s) and participants negotiate the learning objectives in PDAs.	(1)	(2)	(3)	(4)	(5)
11.	Participants are encouraged to set their own individual learning objectives.	(1)	(2)	(3)	(4)	(5)
12.	The facilitator(s)/trainer(s) solicit input from participants regarding learning objectives.	(1)	(2)	(3)	(4)	(5)
13.	Evaluation tools are used that help the facilitator(s)/trainer(s) and me work together to identify my learning needs.	(1)	(2)	(3)	(4)	(5)
14.	I have flexibility in designing my learning experiences (activities, etc.).	(1)	(2)	(3)	(4)	(5)
15.	Participants and the facilitator(s)/ trainer(s) become partners in	(1)	(2)	(3)	(4)	(5)

	setting learning objectives.					
16.	There are mechanisms in place to collaboratively design which learning activities would be used.	(1)	(2)	(3)	(4)	(5)
17.	Participants are encouraged to jointly design how their learning would occur in PDAs.	(1)	(2)	(3)	(4)	(5)
18.	The facilitator(s)/trainer(s) rely too heavily on lecture in PDAs.	(1)	(2)	(3)	(4)	(5)
19.	The way learning experiences in PDAs are conducted makes participants passive learners.	(1)	(2)	(3)	(4)	(5)
20.	The methods used to evaluate my learning in PDAs are appropriate.	(1)	(2)	(3)	(4)	(5)
21.	Evaluation methods used in PDAs meet my needs.	(1)	(2)	(3)	(4)	(5)
22.	Evaluation methods help me diagnose my needs for further learning.	(1)	(2)	(3)	(4)	(5)

If you have any other comments, please add them here.

Appendix C

Frequency of Responses to *Adult Learning Principles*

Table 106

Frequencies: Self-directedness

Items		1	2	3	4	5	<i>n</i>
1. I know why learning experiences in Professional Development Activities (PDAs) in my institution would be beneficial to me.	<i>f</i> %	8 (5.8%)	3 (2.2%)	10 (7.3%)	71 (51.8%)	45 (32.8)	137
2. I am satisfied with the extent to which I am an active partner in learning experiences in PDAs.	<i>f</i> %	5 (3.6%)	7 (5.1%)	34 (24.8)	70 (51.1%)	21 (15.3%)	137
3. I feel that I have control over my learning experiences during PDAs.	<i>f</i> %	4 (2.9%)	6 (4.4%)	26 (19%)	73 (53.3%)	28 (20.4%)	137
Overall	<i>f</i> %	17 (4.13%)	16 (3.89%)	70 (17.03%)	214 (52.06%)	94 (22.87%)	137

Table 107

Frequencies: Need to Know

Items		1	2	3	4	5	<i>n</i>
4. It is clear to me why I need to participate in PDAs.	<i>f</i> %	2 (1.5%)	5 (5.1%)	19 (13.9%)	74 (54%)	37 (27%)	137
5. I feel responsible for my own learning during PDAs.	<i>f</i> %	2 (1.5%)	1 (.7%)	9 (6.6%)	76 (55.5%)	49 (35.8%)	137
6. The work issues that motivate me for learning experiences in PDAs are understood.	<i>f</i> %	1 (.7%)	5 (3.6%)	34 (24%)	75 (54.7%)	22 (16.1%)	137
7. I feel I have a role to play in my own learning during PDAs.	<i>f</i> %	2 (1.5%)	3 (2.2%)	7 (5.1%)	75 (54.7%)	50 (36.5%)	137
Overall	<i>f</i> %	7 (1.27%)	14 (2.55%)	69 (12.59%)	300 (54.74%)	158 (28.83%)	137

Table 108*Frequencies: Readiness*

Items		1	2	3	4	5	n
8. I understand why the learning methods used in PDAs are right for me.	<i>f</i> %	2 (1.5%)	7 (5.1%)	39 (28.5%)	67 (48.9%)	22 (16.1%)	137
9. The work issues that motivate me for learning experiences in PDAs are respected.	<i>f</i> %	2 (1.5%)	8 (5.8%)	32 (23.4%)	74 (54%)	21 (15.3%)	137
10. Learning experiences in PDAs are just what I need given my needs or changes in my work.	<i>f</i> %	3 (2.2%)	16 (11.7%)	48 (35%)	61 (44.5%)	9 (6.6%)	137
Overall	<i>f</i> %	7 (1.70%)	31 (7.54%)	119 (28.95%)	202 (49.14%)	52 (12.65%)	137

Table 109*Frequencies: Prior Experience*

Items		1	2	3	4	5	n
11. I feel my prior work experiences help my learning.	<i>f</i> %	1 (.7%)	3 (2.2%)	5 (3.6%)	56 (40.9%)	72 (52.6%)	137
12. My work experiences are a regular part of learning experiences in PDAs.	<i>f</i> %	3 (2.2%)	7 (5.1%)	17 (12.4%)	70 (51.1%)	40 (29.2%)	137
16. I feel my work experiences are a resource for PDAs.	<i>f</i> %	1 (.7%)	6 (4.4%)	17 (12.4%)	80 (58.4%)	33 (24.1%)	137
Overall	<i>f</i> %	4 (2.9%)	16 (3.89%)	39 (9.48%)	206 (50.12%)	145 (35.27%)	137

Table 110*Frequencies: Motivation*

Items		1	2	3	4	5	n
13. I feel better able to perform work-related tasks due to learning experiences in PDAs.	<i>f</i> %	2 (1.5%)	12 (8.8%)	19 (13.9%)	80 (58.4%)	24 (17.5%)	137
14. I feel that mastery of PDAs will benefit my work	<i>f</i> %	2 (1.5%)	4 (2.9%)	22 (16.1%)	73 (53.3%)	36 (26.3%)	137
15. Knowledge gained in learning experiences in PDAs can be immediately applied to my work.	<i>f</i> %	3 (2.2%)	14 (10.2%)	44 (32.1%)	60 (43.8%)	16 (11.7%)	137
17. Learning experiences in PDAs tap my inner drive to learn.	<i>f</i> %	2 (1.5%)	4 (2.9%)	31 (22.6%)	74 (54%)	26 (19%)	137
18. I feel learning experiences in PDAs will assist me in resolving a work-related problem.	<i>f</i> %	3 (2.2%)	8 (5.8%)	33 (21.1%)	74 (54%)	19 (13.9%)	137
19. Learning experiences in PDAs motivate me to give my best effort.	<i>f</i> %	5 (3.6%)	8 (5.8%)	29 (21.2%)	67 (48.9%)	38 (20.4%)	137
20. I feel that learning experiences in PDAs will make a difference in my work.	<i>f</i> %	3 (2.2%)	6 (4.4%)	29 (21.2%)	77 (56.2%)	22 (16.1%)	137
21. Learning experiences in PDAs motivate me to learn more.	<i>f</i> %	2 (1.5%)	4 (2.9%)	29 (21.2%)	74 (54%)	28 (20.4%)	137
Overall	<i>f</i> %	22 (2%)	60 (5.47%)	236 (21.53%)	579 (52.82%)	209 (19.06%)	137

Table 111*Frequencies: Preparing the Learner*

Items		1	2	3	4	5	n
1. Sufficient steps are taken to prepare me for the learning process in PDAs.	<i>f</i> %	6 (4.4%)	17 (12.4%)	50 (36.5%)	59 (43.1%)	5 (3.6%)	137
2. The way my responsibilities are clarified is appropriate for learning experiences in PDAs	<i>f</i> %	4 (2.9%)	10 (7.3%)	39 (28.5%)	76 (55%)	8 (5.8%)	137
3. The way I am prepared for learning experiences in PDAs gives me the confidence I need.	<i>f</i> %	2 (1.5%)	10 (7.3%)	45 (32.8%)	62 (45.3%)	18 (13.1%)	137
Overall	<i>f</i> %	12 (2.91%)	37 (9%)	134 (32.60%)	197 (47.93%)	31 (7.54%)	137

Table 112*Frequencies: Climate Setting*

Items		1	2	3	4	5	n
4. The facilitator(s)/ trainer(s) and I work together to prepare me for learning experiences in PDAs.	<i>f</i> %	4 (2.9%)	20 (14.6%)	45 (32.8%)	54 (39.4%)	14 (10.2%)	137
5. There is an adequate amount of dialogue with my facilitator(s)/trainer(s) regarding my learning needs.	<i>f</i> %	2 (1.5%)	22 (16.1%)	47 (34.3%)	48 (35%)	18 (13.1%)	137
6. Participants are full partners with the facilitator(s)/trainer(s) in learning experiences in PDAs.	<i>f</i> %	2 (1.5%)	14 (10.2%)	43 (31.4%)	64 (46.7%)	14 (10.2%)	137
7. The climate in learning experiences in PDAs can be best described as collaborative.	<i>f</i> %	2 (1.5%)	5 (3.6 %)	29 (21.2%)	74 (54%)	27 (19.7%)	137
9. The facilitator(s) /trainer(s) act as a rich resource for my learning in PDAs.	<i>f</i> %	4 (2.9 %)	5 (3.6 %)	43 (31.4%)	67 (48.9%)	18 (13.1%)	137
10. The facilitator(s) /trainer(s) develop good rapport with participants in PDAs.	<i>f</i> %	4 (2.9 %)	4 (2.9 %)	25 (18.2%)	81 (59.1%)	23 (16.8%)	137
Overall	<i>f</i> %	18 (2.18%)	70 (8.51%)	232 (28.22%)	388 (47.20%)	114 (13.86%)	137

Table 113*Frequencies: Setting Objectives*

Items		1	2	3	4	5	n
10. The facilitator(s)/trainer(s) and participants negotiate the learning objectives in PDAs.	<i>f</i> %	4 (2.9%)	17 (12.4%)	35 (25.5%)	65 (47.4%)	16 (11.7%)	137
11. Participants are encouraged to set their own individual learning objectives.	<i>f</i> %	4 (2.9%)	21 (15.3%)	45 (32.8%)	45 (32.8%)	22 (16.1%)	137
12. The facilitator(s)/trainer(s) solicit input from participants regarding learning objectives.	<i>f</i> %	4 (2.9%)	13 (9.5%)	42 (30.7%)	64 (46.7%)	14 (10.2%)	137
15. Participants and the facilitator(s)/trainer(s) become partners in setting learning objectives.	<i>f</i> %	2 (1.5%)	14 (10.2%)	46 (33.6%)	60 (43.8%)	15 (10.9%)	137
17. Participants are encouraged to jointly design how their learning would occur in PDAs.	<i>f</i> %	5 (3.6%)	19 (13.9%)	54 (39.4%)	48 (35%)	11 (8%)	137
Overall	<i>f</i> %	21 (2.55%)	101 (12.28%)	250 (30.41%)	343 (41.72%)	107 (13.01%)	137

Table 114*Frequencies: Designing Learning Experiences*

Items		1	2	3	4	5	n
13. Evaluation tools are used that help the facilitator(s)/trainer(s) and me work together to identify my learning needs.	<i>f</i> %	5 (3.6%)	24 (17.5%)	45 (32.8%)	52 (38%)	11 (8%)	137
16. There are mechanisms in place to collaboratively design which learning activities would be used.	<i>f</i> %	4 (2.9%)	22 (16.1%)	48 (35%)	52 (38%)	11 (8%)	137
Overall	<i>f</i> %	9 (3.28%)	46 (16.78%)	93 (33.96%)	104 (37.95%)	22 (8.02%)	137

Table 115*Frequencies: Learning Activities*

Items		1	2	3	4	5	n
18. The facilitator(s)/trainer(s) rely too heavily on lectures in PDAs.	<i>f</i> %	3 (2.2%)	42 (30.7%)	54 (39.4%)	32 (23.4%)	6 (4.4%)	137
19. The way learning experiences in PDAs are conducted makes participants passive learners.	<i>f</i> %	8 (5.8 %)	64 (46.7%)	40 (29.2%)	21 (15.3%)	4 (2.9%)	137
Overall	<i>f</i> %	11 (4.01%)	106 (38.68%)	94 (34.30%)	53 (19.34%)	10 (3.64%)	137

Table 116*Frequencies: Evaluation of Learning*

Items		1	2	3	4	5	n
20. The methods used to evaluate my learning in PDAs are appropriate.	<i>f</i> %	4 (2.9%)	17 (12.4%)	63 (46%)	48 (35%)	5 (3.6%)	137
21. Evaluation methods used in PDAs meet my needs.	<i>f</i> %	4 (2.9%)	21 (15.3%)	64 (46.7%)	43 (31.4%)	5 (3.6%)	137
22. Evaluation methods help me diagnose my needs for further learning.	<i>f</i> %	5 (3.6%)	20 (14.6%)	64 (46.7%)	41 (29.9%)	7 (5.1%)	137
Overall	<i>f</i> %	13 (3.61%)	58 (14.11%)	191 (46.47%)	132 (32.11%)	17 (4.13%)	137