Psychology of Language Teaching

A Brief Review with Sample Studies

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While you are experimenting, do not remain content with the surface of things. Don't become a mere recorder of facts, but try to penetrate the mystery of their origin.

Ivan Petrovich Pavlov
1849–1936

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PREFACE

I have always wondered about the role of psychological concepts and findings in exposing and explaining the true nature of our practices and actions. Also, how those concepts and theories dominate our world and enhance or reduce our true potential in our endeavours. Therefore, this still unknown nature of humans' cognition and emotions deserve even more work and study to understand its true value and appreciate its illuminating nature. This book is the result of my academic work as well as my research on the psychological aspects of language teaching during my master's academic education.

The first section of the book includes key psychological concepts involved in language teaching by examining the related literature and prominent studies conducted by researchers. The second part of the book provides sample empirical studies on the covered key concepts to demonstrate the impact of these psychological concepts in language teaching contexts. These empirical studies include detailed research on the impact of hypnotic suggestion on learners' emotional intelligence and academic performance, the effect of the simplified tests on coordinating the attitude of the students with learned helplessness, and a study on the aspects of teacher cognition and various contextual and professional factors influencing teachers' beliefs and practices. Finally, the book concludes with a summary of the presented concepts and studies in educational psychology and language teaching.

I should also mention that my work has been conducted at the Kharazmi University of Tehran. I hope this book may provide novice

researchers with an overall perspective to enhance their understanding of the role of educational psychology in language teaching and teacher professional development.

Consequently, I would like to thank Professor Borg for permitting his valuable work on teacher cognition to be reflected concisely in this book.

PART ONE

KEY PSYCHOLOGICAL CONCEPTS IN LANGUAGE TEACHING

I. EMOTIONAL CONSIDERATIONS

This chapter will discuss the evolution of emotion and the influential aspects of emotional intelligence in guiding individuals' actions by considering the research that has investigated it as a determining factor affecting humans' behaviour.

1. Emotion

1.1. What are emotions?

Emotions are part of our everyday life, and they are critical and important parts of who we are and what we are capable of. For instance, a person's performance may be enhanced by the motivation aroused from his emotions or declined in challenges and risks for fear of incapacity, again, stimulated by his emotions. Lazarus (1991) considers the central role and significance of emotions in humans' life and specifically the psychological aspects of emotion, which are the core of individuals' learning.

To understand emotions, we may consider them as States and Traits. An emotion trait refers to a disposition or tendency of a person to react with emotion. On the other hand, an emotional state is a transient reaction to specific encounters with the environment, one that comes and goes depending on particular conditions. For the trait, we say someone is an angry person; for the state, we say someone is feeling or reacting with anger at a particular time and place. They are

interrelated concepts that influence each other. While states are stimulated in a specific situation, traits would reinforce this stimulation process. In other words, an emotional trait in a person possessing a specific personality characteristic would generate an emotional state or intensify it. As a result, a person with high stability would give rise to a trait and recedes state, and instability in a person would stimulate a state and recedes trait in importance (Lazarus, 1991).

The quest to know the nature of human emotions began by William James in 1884 in his celebrated essay in which he introduced emotions as perceptions of bodily changes. However, before him, there has been a keen interest and intellectual speculation subjected to emotions for centuries by others like Aristotle and the Stoics, who began developing complex accounts of their nature and value (Gardner, Metcalf, & Beebe-Center, 1937). So, theories about emotions stretch back as far as Stoics and ancient Greek who approached emotion as a balance between four senses of humour speculated by Hippocrates and the theory of moderation principle by Aristotle, who emphasized the balance in human emotions. These theories saw emotions as inferior or in conflict with both reason and rationality. During the enlightenment period, there was intellectual attention devoted to emotion in an attempt to understand its nature by philosophers such as Descartes, Spinoza, and Hume. For instance, Descartes provided an intricate taxonomy of emotions by describing their bodily causes, effects, and functions. Considering emotions from an evolutionary perspective, it was Darwin (1872) who initiated this approach in his book "Expression of Emotion in Man and Animals" by advocating that emotions are not simply irrational, but they actually serve an important purpose for us as humans. His theory helped researchers understand the functions of emotion and determine recent physical and neurobiological perspectives of emotions. The cumulative effect of these efforts is a dazzling range of answers to James' question. He advocated a physiological approach and argued that the essence of emotions is a physiological response that is secondary to the physiological phenomenon. This means that each emotion would stimulate a specific physiological and bodily function like raising the heart rate. Accordingly, James Lange, his student, supported this idea by considering the perception of bodily states as the emotion itself.

Then, Cannon (1939) contended that physiological response alone could not explain humans' emotional experience. He argued that

physiological responses are too slow and often imperceptible and proposed a simultaneous experience of both physiological responses as well as experience and subjective quality of emotion after subcortical brain activation of the input stimulus. Schachter and Singer (1962) proposed the two-factor theory of emotion, which states that the appraisal of physiological experience defines and determines the emotional experience. This means that physiological reaction contributed to emotional experience by facilitating a cognitive appraisal that helps to define the emotion itself. Hence, in the first stage, you perceive the stimulus and experience a physiological state; then, in the second stage, you interpret and evaluate your physiological state and experience emotion accordingly. The more recent cognitive theory was advocated originally by Lazarus, who maintained that cognitions and cognitive activities (judgment, evaluation, and thoughts) are necessary for emotions to occur. So, you cannot experience emotions unless you perceive, evaluate, and\or interpret them first.

Other theories have also looked at emotions from different perspectives; among them, you may notice a few especially popular ones that have characterized emotions as behavioural predispositions, biologically based solutions to fundamental life tasks, and culturally specific social constructions (Scarantino, 2005). As you go through these timeline theories of emotion, it gets clearer that you could spot some prominent factors involved in the construction of all theories, namely, physiological response and perception of the input stimulus. So, we may classify all factors involved in emotion as input perception, bodily changes, cognitive factors, behavioural predisposition, biological factors, and environmental issues. However, emotions could be triggered in the absence of a perceptible input or an ongoing action. In fact, humankind is simply hardwired for emotion. With his cognitive power and imagination, he may just pursue his predisposition or expectation and experience physiological response and emotional arousal (affective arousal) for an anticipated and preconceived situation or an upcoming event and action. This experience may be intentional and deliberate by the individual reflecting on a specific and predetermined activity like examination, or unintentionally by the unconscious attention toward the fixed and defined task. Consequently, these situations may or may not be the circumstances in which an emoter is currently disposed of, but he produces the

emotions according to the perceived requirement.

Furthermore, emotions are not constituted of a single phenomenon; they have multiple components that characterize their complex nature. First of all, emotions have a valence, which simply means that they can be positive or facilitative, negative or inhibitive, or neutral. The valence of emotion is believed to be important since, according to Cousins (1976), positive emotional states such as happiness (and laughter) will have therapeutic or prophylactic biochemical consequences in contrast to negative emotional states such as anger and anxiety. The positive emotions may go through a psychological route and, by producing a greater sense of self-efficacy or self-esteem, weaken the psychophysiological consequences of anger and anxiety or other negative emotional states (Lazarus, 1991).

The second components date back to the early writings of Darwin, who declared that emotions serve a certain purpose or function, and they are vital to our survival. We may utilize them to pursue our goals, and without them, we would encounter many problems pursuing and accomplishing our tasks and meaningful objectives in our lives.

1.2. Emotion, mood, feelings, affect, personality trait, cognition

It has been traditional in discussions of emotion to make a distinction among other types and related concepts of emotion and decide on similarities. Understanding the differences between emotion and these related concepts would contribute us to getting a deeper perception of emotion, which is one of the main focuses of this book. Moods generally refer to the more long-lasting state and are described with broad terms such as happy, joyful, cheerful, carefree, apprehensive, excited, irritable, angry-hostile, or melancholy depressed. Unlike an emotion, the mood does not have an intentional or eliciting object and is more diffused. So, you may go to class excited for a while and in a good mood or exhausted with homework and bored with the class for no particular reason. However, according to Lazarus (1991), distinguishing emotions from moods on the basis of time span and duration by considering moods as more enduring may be often true, but some moods seem relatively brief and contextual, thus giving them an on-off character.

Furthermore, emotion is not feeling but is sometimes used to refer to feelings by people (e.g., I am feeling sad). Specifically, feelings refer

to the subjective representation of the individuals' private and internal emotions experiencing them, but emotion also has a physiological response and behavioural component, which is expressed by people. Lazarus (1991) believes that it would be more precise to speak of feelings as sensory perception, as in feelings of pleasure and distaste rather than as emotion, and restrict the word feeling to the awareness of bodily sensations and regard the word emotion for occasions on which there has been an appraisal of harm or benefit.

Similarly, he correctly pointed out that it would be better to use the generic term emotion to refer to the subjective quality of emotional experience rather than using affect to refer to a single facet to stand for the whole. Therefore, affect is a broader and all-encompassing term that refers to general topics of emotion, feelings, and moods together.

We cannot also consider emotions as a personality trait since personality trait is stable individual differences across various situations and time; but, emotions are a more brief response to our external environment or internal thought or feelings. Finally, emotions are not our thought or cognitions. Although Lazarus stated that cognitions could give rise to emotions, they are something with distinct characteristics.

Cognitions do not have facial expressions as well as physiological arousal and changes that are accompanied by emotions. However, this doesn't mean that they are independent of each other or do not affect each other, but they corroborate and work together toward a common goal and purpose in a particular context. Since emotion and reason highly influence each other, it would be beneficial to discuss them in more detail, which may provide us with a better understanding of the function of these factors in a learning situation.

1.3. Reason and emotion

A careful analysis of the history of emotion theory reveals that, despite the existence of a significant association between emotion and cognition, there was a more common assumption that these constructs performed and functioned independently of each other. Damasio (1994), in his book, "Descartes' Error: Emotion, Reason, and the Human Brain", presented his personal reflections that were an attempt to answer his inquiry about the links between body and mind and reason and emotion.

> *I do know when I became convinced that the traditional views on the nature of rationality could not be correct. I had been advised early in life that sound decisions came from a cool head that emotions and reason did not mix any more than oil and water. I had grown up accustomed to thinking that the mechanisms of reason existed in a separate province of the mind, where emotions should not be allowed in to intrude, and when I thought of the brain behind that mind, I envisioned separate neural systems for reason and emotion. This was a widely held view of the relation between reason and emotion, in mental and neural terms. (1994, p. xi)*

Emotions to Damasio act as a monitoring function, while cognitive processes continue, also, as the experience of physiological perception. He provides a description of the connection between emotion and reasoning by stating that:

> *. . .emotion is the combination of a mental evaluative process, simple or complex, with dispositional responses to that process, mostly toward the body proper, resulting in an emotional body state, but also toward the brain itself (neurotransmitter nuclei in brain stem), resulting in additional mental changes. (1994)*

Emotions may be considered as the first element affecting our reason and thought in interpreting situations, making a decision, and acting accordingly to demonstrate their dominance in our life. Therefore, they play a crucial role by facilitating or inhibiting our intellectual processes and imposing their power in controlling our mental and psychological activity projected in our performance. Accordingly, Segal (1997) rightly asked, is it possible that emotion affects thought more than thought affects emotion? Ellison (2001) declared that thought affects emotion, which in turn affects the physical self. Research has revealed that the centres of emotion continued to evolve right along with the neocortex and are now interwoven throughout the brain, wielding effect over brain functions. Furthermore, Goleman (1995) states that according to the brain-imaging technologies that attempt to envision a "map of the human heart," emotional and rational parts of the brain do indeed depend on each other. In addition, we perceive and interpret everything in the situation through a sensory input like eyes, ears, and all of our senses that may be regarded as the input data. This

information is registered and received in the amygdala, a part of the brain most heavily involved in emotional memory, before sending messages to the neocortex (Segal, 1997). Also, according to Caine and Caine (1997), the brain links emotion, perception, and memory.

Segal (1997) considers intellect and emotion two halves of a whole that are synergistic resources; the absence of one makes the other incomplete and ineffectual. According to her, you can get an A on a test by utilizing intellect without emotion, but your success in life is declined without considering emotion. Although emotions may negatively affect a person's reason and performance, they also can motivate and positively reinforce individuals to accomplish and advance in their careers or studies. Therefore, they may be facilitative, inhibitive, and neutral and affect our physical state.

In the educational context, we mostly deal with students' physical state, cognition, and emotions. Students bring with them the invisible emotions that may influence their learning the most, along with their visible physical state, which should be a teacher's centre of attention to understand their invisible part. This emotional state is always present in the learning situation formed by teachers' and learners' thoughts and actions in class, and the dominant mood in the class and their feelings toward the learning situation shape their emotions and personal motivation toward the learning processes. So, besides physical state and intellect, emotions are the dominant aspects present in the learning situation (See Ellison, 2001).

Emotions are part of our cognitive processes, which interfere with our logical and intellectual processes during the various state in our life like learning, decision making, performing, interpreting, evaluating, etc. According to Hargreaves (1997), they are not an alternative to reason but an essential part of thinking, learning, and reason itself. Our personal or value judgments depend on our feelings. Emotional awareness brings our inner world into perspective and enables us to make good choices regarding our needs (Segal, 1997).

In short, we could regard emotions as an ability, if used effectively, donated to contribute to or even empower a person and his cognitive processes to deal with various states like learning and problem-solving situations that demand not only our intellectual capacity but also emotional inspiration to accomplish them. So, according to the above research conducted on the connection between emotion and intellect, we may conclude that emotions are an additional capability that

combines with and assists cognition to enhance our understanding and inner perspective to cope effectively with demanding circumstances. By doing so, a person may be called an emotionally intelligent person who efficiently understands and leads his emotions along with and in the same direction or flow of his thought to recognize his capability in engaging different challenging situations in an attempt to realize his true capacity by stimulating his emotions. We now turn to emotional intelligence, as a critical aspect for humans' success, to review the previous research and understand its crucial role in our life and learning.

2. Emotional Intelligence

2.1. The nature of emotional intelligence

Throughout the history of psychology, research and theory on emotions have risen and receded (Goleman, 2003). Emotional intelligence is a dynamic construct influenced by diverse biological, psychological, and social factors. The field of emotional intelligence is a fairly new one, and there have been numerous research studies conducted in an attempt to understand its dynamic nature and expand it over new areas of humans' lives. Empirical studies investigating the relationship between emotional intelligence and other aspects of our life, namely psychological and psychosocial factors were approved by several researchers, which attest to the significance of emotional intelligence and its remarkable contribution to the field of interpersonal relationships, success in work and personal life, psychological improvement, stress management, academic field, enhancing performance, and much more positive behavioural pattern. There have been many attempts to define this construct, and every endeavour has revealed a new perspective of this dynamic construct that has been subject to unparalleled interest. As a result, it can be defined in various ways, but basically, emotional intelligence is the "ability to accurately identify and understand one's own emotional reactions and those of others" (Cherniss & Adler, 2000).

Salovey and Mayer, who formally presented the term emotional intelligence in their academic article "Emotional Intelligence" in 1990, initially defined it as:

> *A form of intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions. (Salovey & Mayer, 1990)*

In this definition, they considered emotional intelligence as a subset of social intelligence. Later, the revised definition of emotional intelligence by these authors led to the current characterization, which is being widely accepted. So, emotional intelligence was defined as:

> *The ability to perceive emotion, integrate emotion to facilitate thought, understand emotions, and to regulate emotions to promote personal growth. (Mayer & Salovey, 1997)*

In this revision, Mayer and Salovey (1997) assumed that an emotionally intelligent person is capable of recognizing emotional information and performing abstract reasoning using this emotional information. However, this definition is restricted to personal emotions and perceptions and fails to incorporate emotions into the contextual and social perspectives, which comprise understanding others' emotions. This particular point was noticed and informed by Mayer, Salovey, and Caruso (2000), who concluded that emotional intelligence includes the ability to perceive, understand, appraise, and express emotion accurately and adaptively in order to access and generate feelings where they facilitate cognitive activities and, ultimately, the ability to regulate emotions in oneself and others.

After exposing to the work of Salovey and Mayer in the 1990s, Daniel Goleman attempted to provide a useful definition of the concept by specifically emphasizing achieving success, enhancing performance, utilizing social prosperity, and recognizing our emotions. Accordingly, he clarified emotional intelligence as:

> *The capacity for recognizing our own feelings and those of others, for motivating ourselves, and for managing emotions well in ourselves and in our relationships. (1998, p. 317)*

Previously, he defined emotional intelligence as the ability to understand and handle your feelings to motivate yourself to get the job done by being creative and employing your potential in sensing others' feelings to manage your relationship effectively (Goleman, 1997).

Reuven Bar-On (1997), another prominent researcher of the emotional intelligence construct and the originator of the term "Emotion Quotient", used Gardner's work to define emotional intelligence and emotion quotient within the context of personality theory. Thus, with a slightly different view, he defined emotional intelligence as:

> *An array of personal, emotional, non-cognitive, and social competencies, abilities and skills that influence one's ability to succeed in coping with environmental demands and pressures. (1997, p. 4 & 14)*

These three definitions were proposed by dominant characters in this area who primarily attempted to distinguish emotional intelligence from standard intelligence. In addition, lack of consensus may be connected to other major criticisms of the concept, such as the problematic measures of the construct, the flexibility of this construct compared to standard intelligence, unsubstantiated claims about the importance of emotional intelligence, and the similarity of emotional intelligence with personality theories. Because of the lack of consensus on a single definition, it would be wise to study and understand the meaning of emotional intelligence through these prominent characters in this field of inquiry. Therefore, their theories and ideas will be presented to acquire the basic and prominent perspectives and understanding of this construct.

2.2. Theoretical and historical perspectives

It was believed that intelligence per se was always connected with only intellect and cognition, which was called "g" for general intelligence. A person's intelligence, born with a certain degree of it, could be assessed using short-answer tests (IQ tests). The assessed intelligence of a person was considered to be inherent and difficult to change. Intelligence quotients were developed and used during the initial part of the 20th century as measures of intelligence, and French psychologist Alfred Binet pioneered the modern intelligence testing movement. A person's IQ, investigated by modern studies, was connected to his/her potential for success in general (Wechsler, 1958) as well as to leadership success (Lord, DeVader, & Alliger, 1986). However, researchers found that there are other psychological traits that are predictive of success and in additional studies conducted on

the importance of EQ and IQ, IQ accounted for only 4% to 25% of job success while as much as 90% of that success could be linked to emotional intelligence (Goleman, 1998). Also, the validity of the general academic measure of IQ in predicting achievement was soon challenged for the lack of attention to the situational factors such as environment or cultural setting (Riggio, Murphy, & Pirozzolo, 2002).

Gardner's (1998) question, "were the IQ tests in this world to disappear, will it be impossible to identify a person as intelligent or otherwise?", led us to a new world of understanding that recognized not only intellectual prowess but also other inherent abilities in an individual to evaluate his/her overall intelligence. Gardner asserted that interpersonal and intrapersonal intelligence was as important as the type of intelligence that was typically measured by IQ tests (Gardner, 1983). According to Goleman (1995), the origin of the latest resurgence in interest in the subject goes back at least to Gardner's (1983) book "Frames of Mind", a work remarking that there must be more to people than traditional types of intelligence to explain their success in life. Other theorists began to assume that perhaps cognitive intelligence, as measured by IQ tests, did not comprise intelligence in its entirety, and, as a result, the existence of other distinct types of intelligence within one person was conjectured.

However, emotional intelligence's roots can be traced to the beginning of the 20th century to Thorndike, who first regarded "non-intellective" elements to be equally important and identified it as "Social Intelligence". He was considered an influential psychologist in the areas of learning, education, and intelligence, as well as a pioneer in the scientific assessment of intelligence. He identified three bits of intelligence such as: mechanical, social, and abstract. He defined social intelligence as:

> *The ability to understand and manage men and women, boys and girls–to act wisely in human relations. (1920, p. 228)*

Although the concept of social intelligence contributed to theories that insisted on recognizing other aptitudes in an individual, in itself, it was not successful or convincing. It definitely changed the way people perceived intelligence but failed to distinguish itself as a distinct form of intelligence. This inability to distinguish social intelligence as a distinct intellectual entity led to a declining interest in this theory. This was followed by David Wechsler in 1940, the originator of the

Wechsler Adult Intelligence Scale (WAIS), who referred to both non-intellective and intellective elements of intelligence and opined that:

> *The main question is whether non-intellective, that is affective and conative abilities, are admissible as factors of general intelligence. (My contention) has been that such factors are not only admissible but necessary. I have tried to show that in addition to intellective there are also definite non-intellective factors that determine intelligent behaviour. If the foregoing observations are correct, it follows that we cannot expect to measure total intelligence until our tests also include some measures of the non-intellective factors. (Wechsler, 1943)*

Wechsler hypothesized that the non-intellective elements, which included affective, personal, and social factors, were essential for predicting one's ability to succeed in life (Wechsler, 1940). Later in the century, for the lack of consideration and research, interest in the notion of multiple intelligences (non-intellective factors) was revived by Howard Gardner in 1983. A Harvard-educated developmental psychologist and a strong critic of IQ tests, Gardner proposed a theory of multiple intelligences which dictated that:

> *Human beings are better thought of as possessing a number of relatively independent faculties, rather than as having a certain amount of intellectual horsepower (or IQ) that can be simply channeled in one or another direction. (1998)*

Besides several latent abilities, including verbal, mathematical, musical, spatial, and movement-oriented, he divided personal intelligence into interpersonal and intrapersonal intelligence. Interpersonal intelligence is the ability to understand and perceive the intentions, emotions, and desires of others; intrapersonal intelligence is the ability to understand and react to one's own feelings, which every human being possessed, maybe in varying degrees. These bits of intelligence were thought by Gardner to be as important as the type of intelligence typically measured by IQ tests (Gardner, 1983). In 1995, the eighth intelligence "naturalist" was added.

However, the word "Emotional Intelligence" itself was coined first and used in literary writing by Peter Salovey, a professor of psychology from Yale University, and John Mayer, also a professor of psychology

from the University of Hampshire, in 1990 (Cherniss, 2000), who was fascinated by findings of these prominent characters and took the research further by presenting the "Ability Model". They considered emotional intelligence as a pure form of mental ability and thus as pure intelligence. Currently, the ability model proposed by Mayer and Salovey is the only ability model of emotional intelligence.

As mentioned before, among numerous current theories of emotional intelligence, the three that have produced the most interest are those of prominent characters in this field, namely, Bar-On (1997), Mayer and Salovey (1997), and Goleman (1998). According to Goleman (2003), all three theories seek to develop an understanding of how individuals recognize, understand, apply, and manage emotions in order to predict and improve individual effectiveness.

2.3. The Evolution of emotional intelligence theory

Salovey and Mayer: An ability model of emotional intelligence

The ability model of emotional intelligence developed by Mayer and Salovey over a series of articles in the 1990s is an intelligence model framed on the work of the IQ model, only dealing with emotions instead of cognition, and it is considered theoretically well-clarified. (Mayer & Salovey, 1993, 1997; Salovey & Mayer, 1990). They believe that their model focuses on how emotions contribute to intelligence, thought, and cognition, and, also, how emotional reasoning contributes to decisions and actions in everyday life (Mayer & Salovey, 1997). Their revised framework was presented in 1997, resulting in a Four-Branch Model of emotional intelligence. The revised ability-based model presents emotional intelligence as having four branches that lay emphasis on emotional perception, assimilation, understanding, and management ranging from the most basic psychological processes (i.e., identifying and using emotions) to higher-level mechanisms (i.e., understanding and managing emotions).

More specifically, basic psychological processes comprise perception, appraisal, and expression of emotion in the first branch and more complex psychologically integrated processes that require reflective regulation of emotions in the last branch. Each branch is divided into four abilities for a total of 16 emotional intelligence abilities. These abilities are then classified into early developing abilities and abilities that take longer to develop. The following table (Table 1) presents a concise form of the four-branch model based on the Mayer

and Salovey (1997) diagram.

Table 1.

Components of the Four-Branch Model of Emotional Intelligence

Emotional Intelligence	
Emotional perception	Emotions are perceived and expressed Emotions are sensed and influence our cognition
Emotional integration	Thoughts promote emotional, intellectual, and personal growth
Emotional understanding	Emotional signals are understood along with their implications
Emotional management	Management encourages openness to feelings

The first branch, "Perception, Appraisal, and Expression of Emotion Ability", is to be aware of and express your emotions and emotional needs accurately to others. Emotional perception also includes the ability to distinguish and discriminate between accurate and inaccurate or honest versus dishonest expressions of emotion. The second branch, "Emotional Integration; Emotional Facilitation of Thinking Ability", is to distinguish among the different emotions being felt and identify those influencing thought processes. Also, emotions prioritize thinking by directing attention to important information, and emotional states differentially encourage specific problem approaches, such as when happiness facilitates inductive reasoning and creativity.

The third branch, "Emotional Understanding; Employing Emotional Knowledge Ability", is to understand complex emotions such as feeling two emotions at once and recognising transitions from one to the other. In addition, it is the ability to interpret the meanings that emotions convey regarding relationships, such as that sadness often accompanies a loss. The fourth branch, "Emotional Management; Reflective Regulation of Emotions Ability", is to connect or disconnect from an emotion depending on its usefulness in a given situation, and reflectively monitors emotions in relation to oneself and others (Mayer & Salovey, 1997).

Finally, Mayer, Salovey, and Caruso's Emotional Intelligence Test

(the MSCEIT – the ability measure of emotional intelligence) is a complete test in that it meets several of the standard criteria for a new intelligence such as:

- It is operationalized as a set of abilities.
- It is objective in that the answers on the test are either right or wrong as determined by expert scoring and consensus.
- Its scores correlate with existing intelligence while accounting for the unique variance.
- Scores increase with age.
- It can classify each respondent within the range of E.I.Q. scores.
- It can be used in a multitude of settings and situations, including corporate, educational, clinical, correctional, research, and preventative settings (Mayer, Salovey, & Caruso, 2002).

Bar-On: A mixed model of emotional intelligence

Bar-On, the director of the Institute of Applied Intelligences in Denmark and consultant for a variety of institutions and organizations in Israel, developed one of the first measures of emotional intelligence and used the term "Emotion Quotient". He extended the work of Salovey and Mayer, framing the idea of emotional intelligence in terms of well-being and behaviour (Bar-On, 1997). Therefore, ability models regard emotional intelligence as a pure form of mental ability and, thus, as pure intelligence, but mixed models of emotional intelligence combine mental ability with personality characteristics such as optimism and well-being (Mayer, 2001).

Bar-On's model encompasses both social and emotional factors when developing and measuring emotional intelligence and offers a broader perspective on emotional intelligence than Salovey and Mayer. He asserts that the incorporation of emotional and social competencies determines how well we can manage ourselves, interact and relate with others, and manage the daily challenges of life. The assumption of the Bar-On model is that high levels of social and emotional functioning will lead to high levels of psychological wellbeing (Bar-On, 2010).

Bar-On's model of emotional intelligence concerns the potential for performance and success rather than performance or success itself and is considered process-oriented rather than outcome-oriented (Bar-On,

2002). It focuses on a multi-factorial array of interrelated emotional and social competencies, skills, and facilitators, including the ability to be aware of, understand, and express oneself and relate to others; the ability to deal with strong emotions; and the ability to adapt to change and solve problems of a social or personal nature (Bar-On, 1997).

In his model, Bar-On identifies five components and the latent capability of emotional intelligence, and within these components are sub-components or 15 conceptual constructs in the operationalization of this model, which all pertain to five specific dimensions of emotional and social intelligence:

- **Intrapersonal:** *Emotional self-awareness, assertiveness, self-regard, self-actualization, and independence.*
- **Interpersonal:** *Interpersonal relationships, social responsibility, and empathy.*
- **Adaptability:** *Problem-solving, reality testing, flexibility.*
- **Stress Management:** *Stress tolerance and impulse control.*
- **General Mood:** *Happiness and optimism. (2002, p. 3)*

Six steps were followed to develop the Bar-On model of emotional and social intelligence.

- Identifying and grouping relevant competencies that impact human effectiveness.
- Defining the competencies and skills clusters.
- Constructing an experimental assessment tool, which initially consisted of over a thousand items.
- Cutting down the items to 15 scales and 133 items in the EQ-i.
- Creating norms for the EQ-i on 3 831 adults in the USA.
- Conducting further validation studies on EQ-i worldwide (Bar-On, 2007).

In general, Bar-On considers emotional intelligence and cognitive intelligence to contribute equally to a person's general intelligence, which then offers an indication of one's potential to succeed in life (Bar-On, 2002). It seems that he regards his model as a broader construct of emotional intelligence and called it "emotional and social intelligence". In short, Bar-On developed the EQ-i (Emotional Quotient Inventory), which is a self-report tool consisting of 133 items

and uses a five-point response scale to measure five meta-factors for individuals of sixteen years of age and over in dealing with environmental demands and pressures.

Goleman: A mixed model of emotional intelligence

The second mixed model of emotional intelligence has been proposed by Daniel Goleman, a psychologist and science writer who has previously written on brain and behaviour research for the New York Times, within a somewhat different conception. Goleman, inspired by the findings of Salovey and Mayer in the 1990s, conducted his own research in the field and eventually wrote "Emotional Intelligence" (1995), a prominent book that sensationalized the topic, and

> *Popularized Emotional intelligence, and made new and extraordinary claims about its importance, including that it is as powerful and at times more powerful than IQ. (1995, p. 34)*

Whereas Reuven Bar-On's model is based on the context of personality theory, emphasizing the co-dependence of the ability aspects of emotional intelligence with personality traits and their application to personal well-being, Daniel Goleman's mixed model emphasized performance, integrating an individual's abilities and personality with applying their corresponding effects on performance in the workplace (Goleman, 2001).

Goleman's (1995, 1998) mixed model conceptualizes the emotional intelligence framework and outlines five competencies that are associated with emotional intelligence, this being self-awareness, self-regulation, self-motivation, social awareness (empathy), and social skills (relationship management). He discusses each competency in detail (1995) as presented in the following table (Table 2).

However, independent reviews of Goleman's (1995, 1998) popular writings have shown that his claims are unsubstantiated and lack empirical support and evidence (Mayer et al., 2000). Several measurement tools have been developed based on Goleman's model of emotional intelligence and its corresponding competencies, namely,

- Emotional Competency Inventory (Boyatzis, 1994).
- Emotional Intelligence Appraisal (Bradberry, Greaves, Emmerling, et al., 2003).

- Work Profile Questionnaire - Emotional Intelligence Version (Performance Assessment Network, 2000).

Table 2.

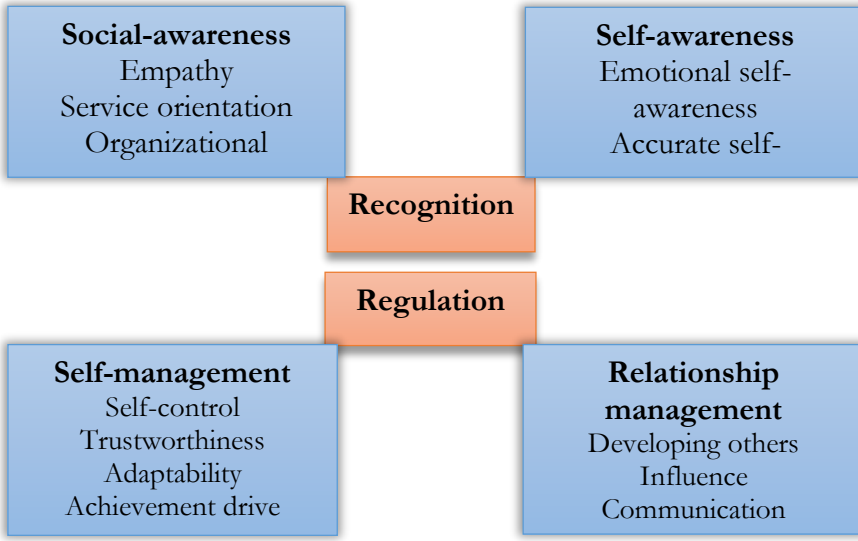
Goleman's (1998) Mixed Model Competencies

Competency	Explanation
Self-awareness	Knowing one's internal states, preferences, resources, and intuitions.
Emotional management	It enables the individual to manage his own internal states, impulses, and controls.
Self-regulation	Involves self-monitoring, which allows the individual to adjust his behaviour according to external, situational factors. The element of self-regulation includes aspects such as trustworthiness, self-control, conscientiousness, adaptability, and innovation.
Self-motivation	The control of emotional tendencies that facilitates reaching one's goals.
Social awareness	An awareness of other people's feelings.
Social skills	Adeptness at handling interpersonal relationships

Goleman's competence model has undergone a number of revisions since it was first developed. The last revision of the model was made on the basis of statistical analysis conducted by Boyatzis, Goleman, and Rhee (2000) and five clusters were integrated into the four dimensions that still form the basis of the model as represented in the following figure (Figure 1).

Figure 1.

Goleman's (2001) Emotional Intelligence Competencies



2.4. The development of research on emotional intelligence

Many constructs and factors have been found to influence or have a direct or indirect correlation with emotional intelligence, both contributive, facilitating the performance of an individual, and inhibitive or having a negative effect on individuals' performance. We will consider some of the dominant factors studied in recent research.

Age

There have been many studies certifying the contributive effect of age in improving emotional intelligence. For instance, Kafetsios (2004) studied 239 adults aged between 19–66 years and found that older participants scored higher on three out of four branches of emotional intelligence (e.g., facilitation, understanding, and management), which supports the view that emotional intelligence develops with age. Also, Van Rooy, Alonso, and Viswesvaran (2005) compared different groups' scores on a test of emotional intelligence with their age. Results indicated that emotional intelligence scores tended to increase with age. However, there have been studies that consider emotional

intelligence independent of age. For instance, Tyagi (2004) measured emotional intelligence and its relation to age among secondary school teachers and found that the level of emotional intelligence is low and independent of age. Likewise, Jacques (2009) had reported that age did not predict emotional intelligence among a sample of 221 college students.

Gender

Sex has also demonstrated a significant relationship with emotional intelligence. In a study conducted by Brackett, Warner, and Bosco (2005), assessing 86 heterosexual couples' emotional intelligence, it was found that female partners were significantly higher on their emotional intelligence scores than male partners. Similarly, Austin, Evans, Gold water, and Potter (2005) assessed their feelings about a communications skills course component of 156 first-year medical students who have been completed measures of emotional intelligence and physician empathy and found out females scored significantly higher than males on emotional intelligence.

However, a study by Depape, Hakim-Larson, et al. (2006) examined gender as a predictor of emotional intelligence in a diverse sample of 126 undergraduate participants and observed that gender was not a significant predictor of emotional intelligence contrary to their expectations. Another study on sex differences in emotional intelligence conducted by Carr (2009) among medical schools students (N = 177) indicated that male candidates had higher emotional intelligence scores than females.

Socioeconomic status

The relationship between emotional intelligence and socioeconomic status has been studied, resulting in a significant relationship between emotional intelligence scores and students' satisfaction with their family socioeconomic status. In addition, in a study by Mohanty and Devi (2010), the role of good education and occupation of parents in the interpersonal relationship of adolescents and their ability in establishing and maintaining a mutually satisfying relationship has been approved.

Academic achievement

In recent years, there has been an increasing amount of literature on

emotional intelligence, a large number of which have focused on the relationship between emotional intelligence and academic achievement, language learning, and language proficiency. Research evidence demonstrating the predictive effects of emotional intelligence on academic achievement is growing enormously.

It has been reported that children with high emotional intelligence are more confident and better learners with high self-esteem and few behavioural problems. Also, they are more optimistic and happier and handle their emotions better (Ghosh, 2003; Gill, 2003). A research study was carried out by Barchard (2003) to show the extent to which emotional intelligence, cognitive ability, and personality domain predicted academic achievement of undergraduate psychology students using one-academic year scores as the criterion of assessment. The result indicated a strong association between cognitive ability and personality domain with academic achievement. Furthermore, Parker, Creque, Barnhart, et al. (2005) examined the relationship between emotional intelligence and academic achievement among 667 high school students who completed EQ-i: YV. After comparing students' academic records and data from EQ-i: YV at the end of the academic year, it was found that academic success was strongly associated with several dimensions of emotional intelligence.

However, in the study of Bastian, Burns, and Nettelback (2006) investigating the relationship between emotional intelligence and academic achievement on 246 predominantly first-year tertiary students, it was found that correlations between emotional intelligence and academic achievement were small and not statistically significant. According to Reilly (2005), in order to train students to understand emotion and increase their emotional intelligence in negotiation courses with traditional lectures, we can use role-plays and simulated exercises.

In this study, he described and analyzed one simulated exercise that has proven to be particularly effective in the classroom for teaching both the theory and practice of emotional intelligence; set forth the rudimentary components of a possible curriculum for emotions training, and concludes with reasons why law schools and other professional degree-granting programs can and should make training in emotions a curriculum staple.

This is one sample study that has supported emotional training in the curriculum in order to further empower teachers and even students

to recognize their emotions and deal with them effectively. In addition, this is also one of the prominent aims of the study to popularize the immense impact of emotion and emotional intelligence in learning situations. Now, we will turn to more cognitive aspects of language teaching by considering dissonance and cognition as the main themes of the next chapter.

II. COGNITIVE CONSIDERATIONS

In this chapter, we will consider teachers' cognition to understand their sensitivity to inconsistencies, how they recognize and deal with dissonance, and how they differ in resolving and reducing it in their professional careers. Therefore, this chapter mainly provides a review of literature on teacher cognition and cognitive dissonance. First, I have outlined the historical development of teacher cognition research to provide the necessary background to understand this research field. Then, I have described the relationship between beliefs and practice, which may lead to dissonance. Following that, I have presented the historical and theoretical aspects of cognitive dissonance as well as its major developments. Finally, I have discussed the studies about teacher beliefs, teacher cognition, and dissonance to consider their close correlation and interaction.

1. Teacher Cognition

1.1. Overview of teacher cognition

Before the 1970s, the focus of much research activity was on teaching effectiveness by correlating patterns of teaching behaviour with students' academic achievement, and studies on teaching within the field of general education were characterized by the behaviourist paradigm. Teacher cognition received scant research in this period, which regarded teaching as a cause (teaching behaviours) and effect (student learning) pattern or as a linear activity by looking for a

relationship between certain teaching practices and subsequent learning outcomes. In other words, underlying this research approach were teachers' actions who ignored their professional judgments (Cochran-Smith & Lytle, 1990).

Also, according to Borg (2009), this process-product model of research's goal was to identify these effective behaviours to be applied universally by teachers. With increasing attention to the "mental lives of teachers" in the 1970s, this view of teaching started to be questioned. By questioning the validity of the behaviourist approaches to the study of teaching, which ignored the interaction effect of teachers' thoughts and actions and their role as active, purposeful decision-makers (Borg, 1999), cognitive psychology proved the influence of human thinking and knowledge on their actions (Borg, 2006).

Developments in cognitive psychology by indicating complex relationships between what people do, know, and believe confirmed the importance of teachers' mental lives in their instructional choices (Borg, 2009), and a paradigm shift occurred (Clark & Peterson, 1986) that was an attempt to understand the ways that teachers think to throw more light on the processes of teaching and learning besides a narrow focus on what teachers do in the classroom. According to Borg (2009), the gathering of an influential panel of academics at a national education conference in the USA was a key point in the emergence of teacher cognition that considered this field of inquiry and concluded in their report that:

> *It is obvious that what teachers do is directed in no small measure. By what they think…. To the extent that observed or intended teaching behaviour is "thoughtless", it makes no use of the human teacher's most unique attributes. In so doing, it becomes mechanical and might well be done by a machine. If, however, teaching is done and, in all likelihood, will continue to be done by human teachers, the question of relationships between thought and action becomes crucial. (National Institute of Education, 1975; as cited in Borg, 2009, p. 1)*

According to this report, in order to understand teachers, researchers needed to study the psychological and cognitive processes of teachers, which set a major departure from the dominant views of teaching by viewing teaching solely in terms of behaviours rather than thoughtful

behaviour. The plethora of research examining various aspects of the psychological dimension of teaching throughout the 1980s and 1990s was the result of this report.

However, other major reasons account for the emergence of this new line of research. For instance, by defining teaching effectiveness in terms of behavioural skills, which "left much of the skilfulness of teaching out of the account," dissatisfaction heightened with the behaviourist tradition (Calderhead, 1996, p. 710). Another major reason, as mentioned above, was developments in cognitive psychology that confirmed teaching as a thoughtful process and emphasized the role of one's knowledge and beliefs in thinking, acting, and shaping how and what individuals learn. Finally, the significance of ethnographic and qualitative methodology was growing in educational research.

Furthermore, three distinct phases have been identified for research on teachers' thinking by Calderhead (1996). In the 1970s, studies focused on teacher judgment and decision-making (e.g., Peterson & Clark, 1978); and how their decision-making informed their practices. In other words, research activities addressed mostly how teachers' thought processes guided their behaviours and practices before teaching (proactive decisions) and while teaching (interactive decisions). After recognizing that decision-making was not the only research construct for examining teaching thinking (Freeman, 1996), research expanded to include other factors, namely, teachers' perceptions, attributions, judgments, reflections, evaluations, and routines, which shaped the second phase. Teacher cognition research in this phase enjoyed rapid development and terminological proliferation, which indicated the growing interest in teacher cognition research. The terminological proliferation is considered to be a necessary process in the conceptualization of an emerging domain of educational inquiry, but it may also lead to "definitional confusion" (Eisenhart, Shrum, Harding, & Cuthbert, 1988).

According to Borg (2006), research on teacher cognition in the 1990s "was largely conceptual; the need was felt not only to generate more substantive findings but also to make sense of the wide range of often confusing and conflicting conceptions of teacher cognition which had emerged" (p. 28). Therefore, several reviews (i.e., Borg, 2003, 2006; Calderhead, 1996; Pajares, 1992) were launched to examine research on teachers' beliefs and knowledge in an attempt to explicate

a variety of ways in which these terms had been conceptualized over the years.

Finally, research activities focus shifted to teachers' knowledge and beliefs, which was stimulated by the work of Elbaz (1983) and Shulman (1986). In other words, in the late 1980s, teaching was increasingly realized to be "a complex cognitive skill" (Leinhardt & Greeno, 1986) that cannot be studied exclusively by teachers' behaviours and practice in classrooms (Freeman, 1995), and their mental lives became established as a key area of research in the study of teaching (Borg, 2009). Also, a significant contribution to developing an understanding of the process of teacher learning happened by increasing interest in teacher cognition in the context of preservice and in-service teacher education and the study of teachers' beliefs and knowledge (Kennedy, 1991). In this phase, researchers were interested in examining the influence of teacher education on teachers' prior cognition and operationalizing teacher cognition research in teacher learning and teacher education.

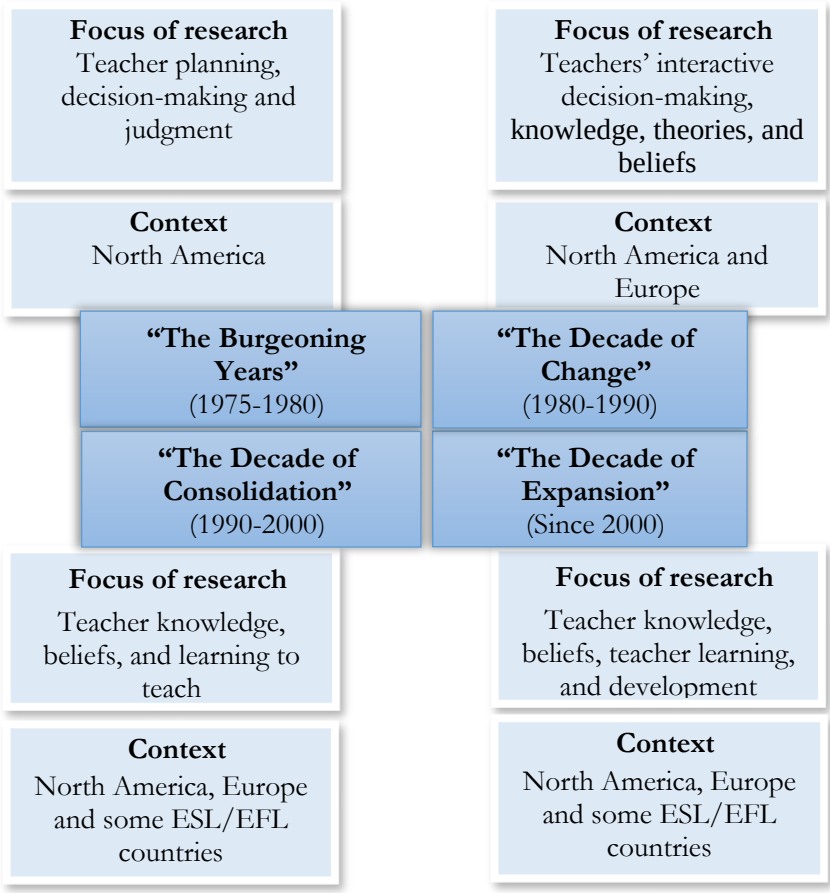
Nowadays, the term teacher cognition refers to the "unobservable cognitive dimension of teaching and what teachers know, believe, and think" (Borg, 2003, p.81), and is recognized as an established domain of inquiry with a large volume of work that has been generated over the years to understand the mental lives of teachers. Therefore, the study of L2 teacher cognition was established in the mid-1990s, approximately ten years after emerging in education (Borg, 2009); and Freeman and Richards (1996) can be regarded as one of the influential publications that emphasized the value of understanding and exploring language teaching by examining the mental aspects of teachers' work. Regarding Calderhead's (1996) phases and several major reviews of this literature (Borg, 2003, 2006; Clark & Peterson, 1986; Fang, 1996; Pajares, 1992), an overview of the major themes associated with the development of teacher cognition research is presented. The following diagram (Figure 2) indicates different stages of the development of teacher cognition research.

Consequently, teaching was understood in its own terms (e.g., from teachers' perspectives; Richards & Nunan, 1990), which initiated studies on teacher cognition as "a new area for inquiry" (Allwright, 1988, p. 209). Teachers' decision-making, self-reflection, pedagogical reasoning skills, knowledge, teachers' principles, language teaching expertise, personal practical knowledge, and beliefs are the major

themes of the ESL teachers' thought processes that have been examined up to now. In recent years we see growing interest in teachers' beliefs in second language teaching research with an increasing volume of research examining various aspects of teacher cognition.

Figure 2.

A Brief Outline of the Development of Teacher Cognition Research (Based on Borg, 2006)



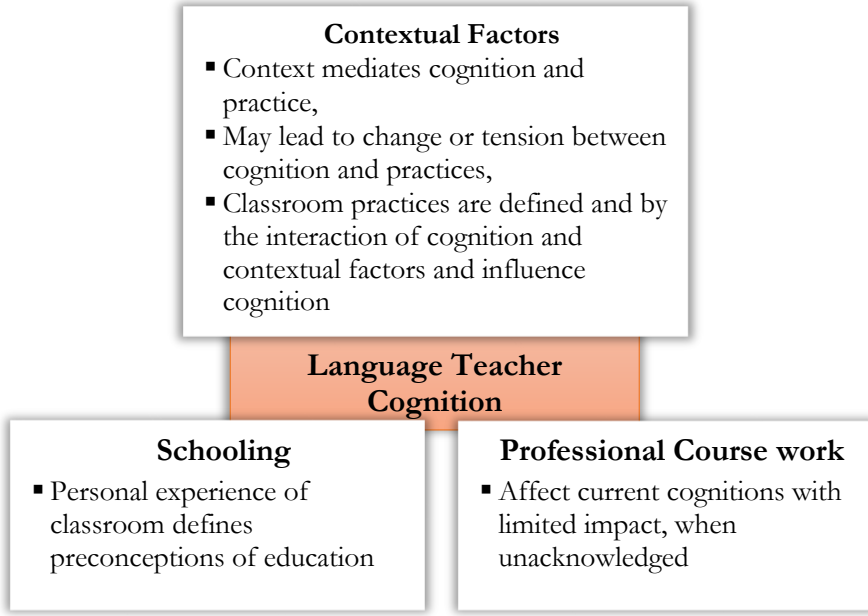
For instance, one of the new areas of research on teachers' "implicit theories" (Clark, 1988) is based on two cognitive assumptions that help us understand teaching and improve teaching practices. The first assumption holds that teacher beliefs influence perception and judgment and, ultimately, affect what teachers say and do in classrooms. The second assumption considers teachers' beliefs as "intuitive screens" (Goodman, 1988, p. 121), which have a filtering effect on how teachers learn to teach. This study attempts to properly address the first assumption that considers the role of teachers' beliefs in their practices and behaviour. In other words, how do two conflicting cognitions or beliefs influence their understanding, perception, and practice? Other key issues examining teacher cognition include: the way researchers conceptualize and understand differences between knowledge and beliefs, the relationship between teachers' beliefs and practices, and the way this relationship is mediated by context and constraints in order to find a way to apply teacher cognition research in teacher learning and teacher education.

To complement this research area, several factors were identified and researched, namely, teachers' thought processes, beliefs, knowledge, instructional practices, teaching and learning experiences, and contextual factors, which have been conceptualized into a framework by Borg (2003). In his framework, which he applied to his review of previous studies in educational research, five factors were accounted for: Teacher cognition (what teachers know, believe, and think), Schooling (previous learning experiences), Professional coursework (experience in both pre- and in-service teacher training programs), Contextual factors (socio-educational conditions), and Classroom practice (teaching experiences). The following diagram (Figure 3) indicates teachers' complex cognition about many aspects of their work by listing the terminologies and concepts that researchers used in the field to describe teacher cognition. Furthermore, double-ended arrows in Figure *3* illustrate the mutually informing relationships between teacher cognition and classroom practices; and between teacher cognition and teacher education, which represents the interaction of these variables in cognitive development by emphasizing the significant effect of contextual factors as well as teachers' prior experiences, teachers' school learning and professional education, on teachers' cognition and practices.

In the second part of this book, we will consider a sample study with these principal factors in determining their potential effects on the cognitive processes of teachers with a specific focus on schooling (personal experiences and preferences), professional coursework (licensure and pedagogical knowledge), contextual factors (context with prescribed methodology), and classroom practice (teaching experiences) to understand these factors' connection with cognitive dissonance. In addition, the role of these factors in promoting or impeding teachers' professional development regarding the stage of dissonance or consonance should also be considered by using this framework.

Figure 3.

Components and Processes in Language Teacher Cognition (Based on Borg, 2006)



2. Teacher Beliefs

A wide range of terms have been considered to define this concept since there seems to be no consensus on how to define the term

'beliefs' (Borg, 2006; Woods, 1996), and it has been regarded as "messy constructs" with several interpretations (Pajares, 1992). For example, Pajares (1992) observed words such as attitudes, values, judgments, axioms, opinions, ideology, perceptions, conceptions, preconceptions, implicit theories, personal theories, internal mental processes, rules of practice, practical principles, and perspectives, which refer to beliefs. Considering terminological confusion in defining beliefs, Borg (2006) explained teachers' beliefs as:

> *A tacit, personally-held, practical system of mental constructs held by teachers which are dynamic (i.e. defined and refined on the basis of educational and professional experiences) throughout teachers' lives. These constructs have been characterized using a range of psychological labels which may often be distinguished at the level of theoretical or philosophical debate but seem to defy compartmentalization when teachers' practices and cognitions are examined empirically. (p. 35)*

Teacher beliefs have been an important aspect of research in teacher education and teacher cognition studies (Borg, 2006; Pajares, 1992; Woods, 1996) which attracted researchers' due attention. For instance, Johnson (1994) mentions three basic assumptions common in studies on teachers' beliefs that include:

- *the impact of teachers' beliefs on their perception, judgment, and what teachers say and do in classrooms;*
- *the role of teachers' beliefs in the way they interpret and translate new information into classroom practices;*
- *its essential role in improving teaching and teacher education. (p. 439)*

He also emphasizes the importance of teachers' beliefs by asserting that the study of teachers' beliefs will ultimately become one of the "most valuable psychological constructs for teaching and teacher education" (p. 439).

As mentioned before, teachers' beliefs can greatly influence their classroom behaviours and even students' outcomes because of their role as active decision-makers (Borg, 2003; Burns, 1992). Drawing on

the prominent work of Pajares (1992) on beliefs, who explored the way to clean up the "messy construct," the summary of the major findings of the nature of beliefs is represented to shape our basic understanding of beliefs. These findings include, among others, the notions that:

- *Beliefs are formed early and tend to self-perpetuate, persevering even against contradictions caused by reason, time, schooling, or experience. (p. 324)*
- *Individuals develop a belief system that houses all the beliefs acquired through the process of cultural transmission (p. 325)*
- *The belief system has an adaptive function in helping individuals define and understand the world and themselves. (p. 325)*
- *Knowledge and beliefs are inextricably intertwined, but the potent affective, evaluative, and episodic nature of beliefs makes them a filter through which new phenomena are interpreted. (p. 325)*
- *Epistemological beliefs play a key role in knowledge interpretation and cognitive monitoring. (p. 325)*
- *Individuals' beliefs strongly affect their behaviour. (p. 327)*
- *Beliefs about teaching are well established by the time a student gets to college. (p. 327; Pajares, 1992)*

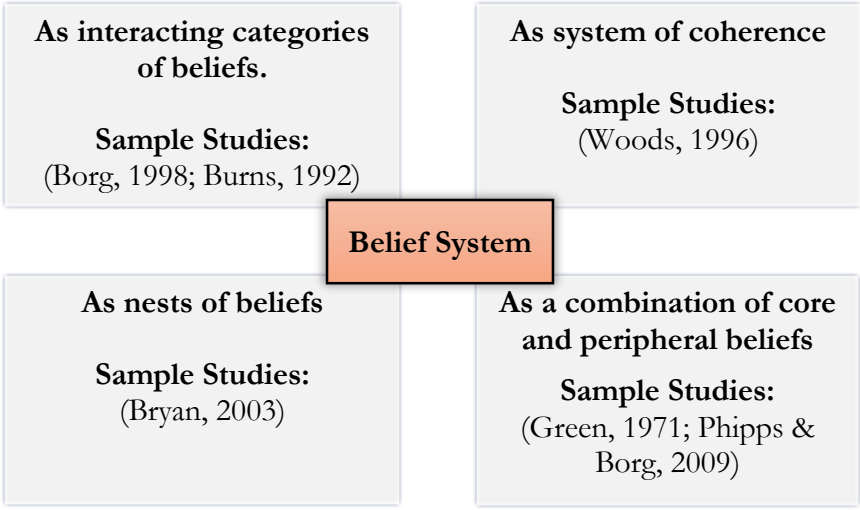
According to Pajares, these assumptions are offered not as a collection of categorical truths but as fundamental assumptions that may reasonably be made when initiating a study of teachers' educational beliefs. Some researchers believe that many beliefs that a teacher holds do not occur in isolation but are organized as systems and conceptualize teachers' belief systems in four major ways, as demonstrated in the following figure (Based on Yin, 2006).

The last way of identifying and characterizing teachers' belief systems (a combination of core and peripheral beliefs) was developed by Green (1971), who presented a theory that individuals' developed

belief system contains all of their beliefs in an organized psychological form. Green's framework will be discussed here solely since it appears to bear a strong connection with this study.

Figure 4.

Approaches to Teacher Belief Systems with Respective Studies

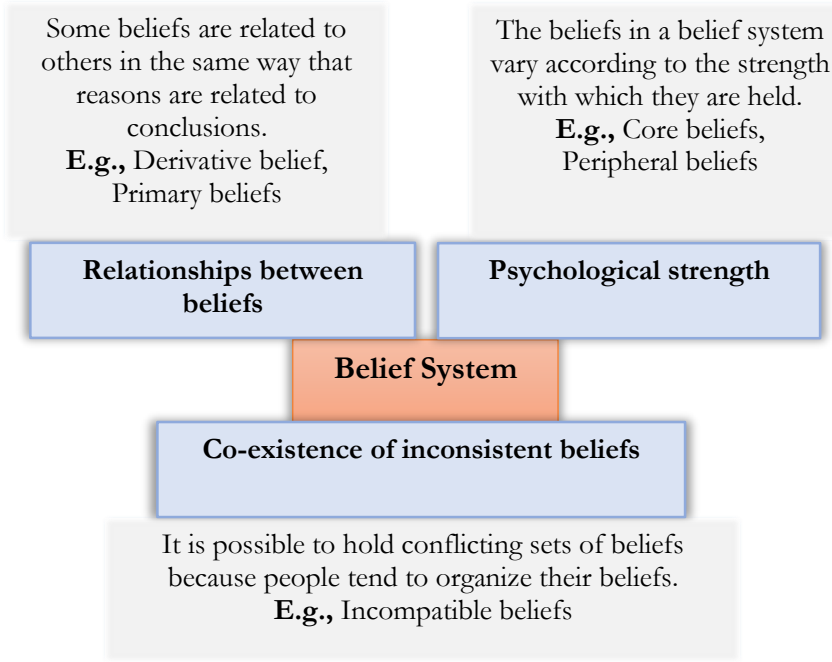


He rightly reasoned that beliefs are acquired and modified as part of a belief system, rather independent of one another. Additionally, he identified three dimensions of belief systems, which are summarized in the following figure (Figure 5).

Green's conceptualization of belief systems clearly, demonstrates different aspects of our belief system and holds great potential for understanding the structure of ESL teachers' beliefs. For instance, this approach explains the strength and importance which is accorded to some beliefs (e.g., core beliefs) than others by teachers in their decisions and practices.

Figure 5.

Three Dimensions of Belief Systems (Based on Green, 1971)



Furthermore, his framework elaborates on the nature of belief change or the merging of conflicting beliefs in the process of modification or rejection of beliefs. In other words, the central or core beliefs are generally difficult to modify and tend to self-perpetuate (Pajares, 1992). The third dimension of this framework (co-existence of inconsistent beliefs) is the main focus of this book, which explores the way teachers tend to organize their inconsistent beliefs. According to Green (1971), beliefs are organized "in little clusters encrusted about, as it were, with a protective shield that prevents any cross-fertilization among them or any confrontation between them" (p. 47). This asserts that teachers may not be aware of incompatible beliefs in their belief systems unless the beliefs are set side by side and their inconsistency is revealed (Ghasemi, 2018; Yin, 2006).

2.1. Relationship between beliefs and practice

The relationship between teachers' beliefs and classroom practice is by far the most researched theme in L2 teacher cognition research. In fact, beliefs have been conceptualized as containing cognitive, affective, and behavioural components, which influence what one knows, feels and does (Rokeach, 1968). Therefore, beliefs have a behavioural component, which drives people's actions. Moreover, teachers' beliefs supervise how they process information, interpret experience, and make instructional judgments and decisions (Clark & Peterson, 1986). It is imperative to examine the relationship between teachers' beliefs and their classroom actions and decisions in order to get a deeper understanding of teachers' perceptions and teaching practice. Considering this critical aspect in second language teaching, research is contradictory by indicating both consistency and inconsistency between beliefs and practice in the literature. While some teachers may have clear and applicable beliefs that are compatible with their practice and contextual factors, other teachers' beliefs may not be reflected in their classroom practices for a number of reasons, namely, conflicting beliefs that teachers sometimes hold (Calderhead, 1996), or prescriptive curriculum and methodology. It appears that a small number of studies explored the relationship between cognition, teachers' practices, and teaching experiences (Ghasemi, 2018; Nunan, 1992; Tsui, 2009).

One of the early studies that explored the relationship between ESL teachers' beliefs and practice was Johnson (1992), who found that the teachers in her sample held clearly defined beliefs in teaching reading by comparing their classroom practices with their beliefs through observation. By interviewing them, she put them in three methodological approaches according to their particular view of language, which appeared to be consistent with their teaching. Also, the impact of teachers' prior language learning experiences, which is called "the apprenticeship of observation" (Lortie, 1975, p. 61), on instructional decisions and classroom behaviour has been acknowledged (Johnson, 1994; Peacock, 2001; Woods, 1996). The role of contextual factors in yielding inconsistency between novice ESL teachers' principles and practices during teacher education was investigated by Spada and Massey (1992). Accordingly, the impact of difficult conditions and heavy workloads on teachers' pedagogical decisions was approved by Crookes and Arakaki (1999), who found

that teachers in their study who worked 50 hours a week were seen to opt for instructional practices according to the context, despite its conflict with the teachers' beliefs.

There are plenty of studies considering the mismatch between teachers' beliefs and classroom practices (e.g., Basturkmen, Loewen, & Ellis, 2004; Ghasemi, 2018; Johnson, 1996). Although considering the stated beliefs of teachers, which are "potentially conflictual rather than inherently inconsistent", may contribute to this line of inquiry (Basturkmen et al., 2004, p. 268), in some cases may lead teachers to leave the teacher preparation course (Galman, 2009). However, according to Ghasemi (2018), based on the demands and complexities of classroom life, which constrain teachers' abilities to provide instruction that aligns perfectly with their beliefs (e.g., prescriptive contexts), such inconsistencies are not unexpected.

Research on teachers, particularly, needs expansion in spite of the many advances in the field of teacher cognition. The need to explore EFL teachers' beliefs is particularly imperative in view of the many institutes prescribing their theoretical and methodological foundations (Ghasemi, 2018). In this book, therefore, I investigated in-service teachers' beliefs, examining whether and how teachers' pre-formed beliefs and dispositions in prescribed contexts influence their teaching. In addition, this book aims to explore teachers' cognition in such contexts by considering the relationships between teachers' beliefs and other professional characteristics, namely, the experience of teaching, academic licensure, and their ideals in language teaching.

3. Cognitive Dissonance

The original theory of cognitive dissonance formulated by Leon Festinger dominated social psychology from the 1950s until the 1970s and revolutionized thinking about psychological processes, particularly regarding the effect of rewards on attitudes and behaviour and the impact of behaviour and motivation on perception and cognition. Festinger theorized that when an individual is exposed to new knowledge elements in the context of his pre-existing knowledge that are relevant but inconsistent with each other, a state of discomfort is created. In other words, Festinger believed that if the new event or information is in line with the previously constructed beliefs, then the individual would feel supported as the new stimuli match with the individual's prior knowledge, which is referred to as a state

consonance.

On the contrary, when new information or events stood in opposition to previously constructed beliefs, the state is referred to as the state of dissonance that causes some discomfort for the individual (Festinger, 1957). In other words, the core notion of the theory states that dissonance is a negative drive state that occurs whenever an individual simultaneously holds two cognitions (ideas, beliefs, opinions) that are psychologically inconsistent, and they strive to reduce it by adding "consonant" cognitions or by changing one or both cognitions to make them "fit together" better (Aronson, 1969, p. 3). However, the theory is somewhat counterintuitive and, in fact, referred to as action-opinion theories, which propose that actions can influence subsequent beliefs and attitudes that are counterintuitive in that it would seem logical that our actions are the result of our beliefs/ attitudes, not the cause of them.

Furthermore, cognitive dissonance theory is based on three fundamental assumptions that emphasize humans' sensitivity to inconsistencies between actions and beliefs, namely,

- Recognizing the inconsistency would motivate individuals to seek resolution.
- Possibility of resolution by changing beliefs.
- Changing actions, changing the perception of action (Festinger, 1957).

Accordingly, four kinds of situations in which dissonance arousal may occur were enumerated by Festinger (1 957):

- The logical inconsistency of two cognitions.
- Inconsistency between cultural mores.
- Inconsistency between a general and more encompassing cognition.
- Dissonance arousal by past experience.

Also, how dissonance actually gets reduced depends on the resistance to change of the relevant cognitions, which derives from the extent to which a change would produce new dissonance (Festinger, 1957). By adding new information to create a sense of dissonance, four reactions are expected from individuals based on Festinger's (1957) theory. First, in order to discredit the new information, an individual may choose to

attack the information. Second, individuals may choose to rationalize or modify the information for making consonance between the new information and previously held beliefs. Third, the individual may accept the new information as accurate but refuse to change her or his original beliefs conducive to creating a continuing or unresolved state of dissonance. Finally, the individual may modify his/her original beliefs and accept the new information as accurate, accordingly.

According to Festinger's (1957) theory, people are motivated by the unpleasant state of dissonance to reduce the inconsistency by supporting the cognition most resistant to change. Therefore, several ways have been identified to reduce dissonance, namely, adding consonant cognitions, subtracting dissonant cognitions, increasing the importance of consonant cognitions, or decreasing the importance of dissonant cognitions. Also, change in attitudes is considered one of the assessed ways of reducing dissonance, which is likely to be in the direction of the cognition that is most resistant to change. Furthermore, a state of dissonance can affect an individual's behaviour, as he/she attempts to regain consonance. For example, the impact of positive and negative prior language learning experiences on teaching thinking and instructional decisions and practices has been acknowledged (Ghasemi, 2019; Phipps & Borg, 2007). Dissonance in a decision may be reduced by viewing the chosen alternative as more attractive and the rejected alternative as less attractive. As indicated by Brehm (1956) in his predictions for post-decision processing, by making a difficult decision, individuals change their attitudes to become more negative toward the rejected alternative, and with an easy decision, individuals did not change their attitudes. Therefore, investigating these reactions, responses, and effects specifically among novice teachers by Festinger's (1957) theory of cognitive dissonance could serve a valuable role in teacher education, which is the main focus of this study.

According to Pedder and Opfer (2013), teachers tend to learn and work in contexts of values–practice dissonance in which they may simply choose to live with the dissonance between what they do and what they value individually or collectively. Otherwise, the conflict between values and practices can prompt teachers to re-examine their professional learning practices and the values they place on those practices in order to bring practices and values into closer alignment and consonance. In other words, teachers may often have difficulty

pinpointing the source and nature of the opposing thoughts involved, or they may instead attempt to understand the general feelings associated with dissonance and feel comfortable enough in their place in the power structure of the classroom setting to talk about their feelings, experiences, and points of contention (Holt Reynolds, 1992).

Awareness of dissonance can result in what Woolfolk Hoy, Hoy, and Davis (2009, as cited in Pedder & Opfer, 2013, p. 545) call a "change provoking disequilibrium," which refers to the dissonance between what teachers regard significant for enhancing the quality of their students' learning and perceptions of current professional learning, further emphasizing the significance of attending to relationships between values and practices. However, if the dissonance gap was too large, teachers might dismiss new ideas as inappropriate to their situations and reject rather than adopt new change because of reconstructing current values, beliefs, and knowledge consistent with the old learning (Timperley & Lee, 2008; Coburn, 2001). I will try to cover the possible formation, relationship, and impact of dissonance awareness in teachers with different characteristics to recognize their established value-practice dissonance and consonance.

3.1. Major developments in cognitive dissonance

Cognitive dissonance theory has been an active field of study for five decades and has been considered an appropriate tool to make sense of non-obvious events. In this section, major experimental findings on cognitive dissonance are presented in order to connect it to the teaching practice in a prescribed context to demonstrate a comprehensive picture of cognitive dissonance and its role in teaching. The first hypothesis introduced by Aronson and Mills (1959) was the concept of effort justification, which states that dissonance is aroused whenever a person engages in an unpleasant activity in order to obtain some desirable goal. In other words, as more onerous and unpleasant it becomes to achieve the desired goal or perform an activity, dissonance is aroused, and as the desirability of the outcome or goal is increased, dissonance is reduced. Therefore, to reduce dissonance in contexts with prescribed methodology, institutions may utilize strict screening tests to enhance the profitability of teaching there and reduce dissonance as in Aronson and Mills' (1959) experiment and screening tests for students to enter a group that made an effort pleasant and justifiable.

The second hypothesis comes from Festinger and Carlsmith (1959) by introducing induced compliance, a study in 1959 that shook up experimental social psychology (Cooper, 2007). They hypothesized that individuals might induce to act in a way that is contrary to their attitudes. In fact, if a person has little incentive or justification for doing a counter-attitudinal action, he/she changes his/her attitude toward that action. This means that we attempt to justify ourselves internally to the action we believed to be undesirable and induce ourselves to comply with it. We modify our attitudes by convincing ourselves that our previous attitudes were incorrect. This form of attitude change may occur in institutes with a low salary in which participants justify their actions internally by emphasizing the desirability of teaching practice, as in Festinger and Carlsmith's (1959) research in which low-paid participants reported a more positive attitude toward a boring action. On the other hand, emphasizing the methodology and teaching practices in the institute may induce desirability of the process and overshadow the outcome, which is conducive to reduced dissonance and attitudinal change.

Another researched aspect of dissonance reduction is responsibility denial, which has been studied by Gosling, Denizeau, and Oberle (2006). Generally, if an individual believes that he/she had no choice but to accommodate and behave as required, or the consequence was unforeseeable, he will be able to deny and absolve himself of responsibility for an aversive outcome. Changing attitudes is a key element in dissonance reduction; if responsibility is denied, the attitude would be changed, and the process is over (Cooper, 2007). Imagine this process of responsibility in teachers, particularly in prescribed contexts, who take students' learning as their responsibility versus teachers who deny it. The consequences of these decisions are critical in dissonance arousal and reduction and directly influence their teaching practice.

After these shreds of evidence and experiments, two revisions of dissonance theory were proposed by researchers in the late 1960s as motivational explanations for dissonance effects, namely, Aronson's (1968) self-consistency theory and Steele's (1988) self-affirmation theory (Harmon-Jones & Harmon-Jones, 2007). According to Aronson's self-consistency theory, inconsistency between two cognitions is not the sole cause of dissonance, but violating one's self-concept by his action can also yield dissonance. Consider a teacher in

a prescribed context who is not satisfied with his teaching and performance, which is directly attached to his self-concept. Violating positive self-concept with negative performance can yield dissonance since performance should correspond with self-concept (see Harmon-Jones & Harmon-Jones, 2007). According to this view, without the involvement of self-concept, there would be no dissonance (Cooper, 2007).

Another alternative was introduced by Steele, who proposed that people tend to maintain and protect the integrity of their self-systems. His self-affirmation theory suggested that people will need to rationalize their activities by modifying or adding information to preserve their equilibrium and the integrity of their ideas about themselves (Cooper, 2007). For instance, when a teacher makes a wrong decision in utilizing particular techniques that are quite a failure, he would distort and rationalize his cognitions about himself and his actions in the service of protecting their self-system.

Consequently, the Action-Based Model of dissonance emphasizes the connection between cognition and action in that perceptions and cognitions are considered to serve as action tendencies. Since dissonance can interfere with effective action, resolving conflicts between cognitions would be critical. Therefore, reducing dissonance by consonance cognitions facilitates effective actions. This model was proposed by Harmon-Jones (2000), who claimed that the inconsistency between important action tendencies is the main cause of dissonance. In other words, our cognitions represent and guide our actions, and when two important cognitions are inconsistent, the drive to act is undermined and reduces the efficiency and potential to accomplish the task (Harmon-Jones, Amodio, & Harmon-Jones, 2009).

For example, dissonance may result when a teacher freely chooses to teach in an institute with a prescribed methodology that is inconsistent with his attitude or belief. In such situations, the teacher may change his attitude to be consistent with their recent behaviour. This means that dissonance occurs since the previous attitude is inconsistent with recent behaviour. Therefore, the teacher adds or modifies new information to create consistent cognitions to justify his action and reduce dissonance (Ghasmi, 2018; Harmon-Jones & Harmon-Jones, 2007). Accordingly, commitment to the behaviour would yield attitude change and consistency (Ghasemi, 2019).

All of the teachers' attributed examples are mere assumptions of the researcher and need to be investigated in order to be substantiated. However, this book is an attempt to test the original theory of cognitive dissonance proposed by Festinger from the Action-Based Model point of view. The above issues have also been regarded to improve our understanding of this phenomenon experienced by teachers in prescribed contexts by considering its effect on teaching situations.

3.2. Research on dissonance

An extensive literature on teachers' beliefs (e.g., Pajares, 1992) and cognition (e.g., Borg, 2003, 2006) exists, which examines what second and foreign language teachers, at any stage of their careers, think, know, or believe in relation to various aspects of their work, and, additionally, consider the relationships between cognition and classroom practices, prior language learning experience, and teacher education to acknowledge the complexity of teachers' mental lives. We can understand the effect of prior experience on teachers' performance because of the dominance of prior language learning experiences in establishing cognitions about language learning by forming the basis of their initial conceptualizations of L2 teaching during teacher education, which may continue to be influential throughout their professional lives (Ghasemi. 2018). Considering the impact of teacher education and teachers' conceptual flexibility, studies suggest cognitive change without indicating the nature of these changes (Borg, 2003).

Another aspect of cognition that has received due attention from the researchers that confirms its role in exerting a persistent long-term influence on teachers' instructional practices is the effect of prior beliefs and experiences on teachers who experience cognitive dissonance in the field of teacher education (see Crawley & Salyer, 1995; Ghasemi, 2018; Holt Reynolds, 1992). This period in which teachers shape their primary beliefs about teaching, which may continue to be influential throughout their professional lives, is called the "apprenticeship of observation" (Lortie, 1975, p. 61). Also, Haney, Czerniak, and Lumpe (1996) worked with the theory of planned behaviour, which emphasized the role of teachers' beliefs as a significant indicator of their behaviours in the classroom.

For instance, Holt Reynolds (1992) examined pre-service teachers' responses to a teacher education course and indicated that when these

pre-service teachers made a positive decision, they linked their decision to a previously developed personal history-based goal for teaching. Additionally, it would seem that the beliefs firmly grounded in experience exerted the most influence on teachers' work (Phipps & Borg, 2009). In an attempt to consider teachers' tensions in the grammar teaching beliefs and classroom practices with attention to the relative influence of core and peripheral beliefs on teachers' practices, Phipps and Borg (2009) emphasized teachers' core beliefs in shaping teachers' instructional decisions. In another study by Numrich (1996), it was confirmed that teachers decide to promote or avoid specific instructional strategies according to their positive or negative experiences of these respective strategies as learners, which is applicable in contexts with no prescribed methodology. When a specific methodology is prescribed, particular restrictions are also applied, which may directly oppose teachers' pre-formed beliefs and create dissonance between beliefs and practice. However, EFL pre-service teachers' prior language learning experiences may also have a positive impact on teacher beliefs and practices (Ghasemi, 2018).

Specifically, the impact of dissonance on teachers' cognition, approaches, and students' learning has also been explored to be significant. For example, Prosser, Ramsden, Trigwell, and Martin (2003), in a quantitative study, investigated dissonant forms of university teaching by considering students' learning, which indicated dissonant teaching approaches of teachers when students reported lower quality learning experiences (poorer teaching, higher workloads, less clear goals), and consonance teaching approaches of their teachers when students reported higher quality learning experiences. This study clearly demonstrated the significance of correspondence of approaches to teaching and teachers' perceptions of teaching and learning context, which result in more control over their practices.

In addition, dissonance has been recognized as one possible catalyst promoting preservice teacher identity development, which helps teachers "transform professional identities defined by the circular self-defined logic of unexamined habitus to one that negotiates, incorporates and speaks back to multiple conflicting ideologies to create a reflective narrative of self" (Galman, 2009, p. 471). In other words, the relationship between dissonance and identity development has been demonstrated through the lens of the stories they learn and tell during and about their initial experiences of becoming teachers,

which suggests that dissonance may play an important catalytic role in pre-service teacher identity development among the beginning pre-service teachers. The role of dissonance in identity and professional development is not deniable (e.g., Brindley, Quinn, & Morton, 2009), but in some cases, pre-service teachers may not be willing to negotiate the dissonance and leave the teacher preparation trajectory for less dissonant contexts (Galman, 2009).

Considering various ways of educating preservice teachers, which have been a controversial and divergent issue among teacher educators, specific ideologies, namely, the behaviouristic or technical-skill and the inquiry-oriented ideologies have been applied. While new recommendations for educating preservice teachers tend to appear and apply when an understanding of the professional development of teachers increases in the teacher education community (Harrington, 1995), certain old theoretical and methodological perspectives still appear to be utilized and prescribed in some institutions and teacher education courses (e.g., Iran). According to Harrington (1995):

> *Students of teaching must learn to deal with the many dilemmas they will encounter in the course of their work. Because teaching and learning in increasingly diverse contexts are complex, prospective teachers cannot come to understand the dilemmas of teaching only through the presentation of techniques and methods. (p. 203)*

The complex relationship between teachers' beliefs and practice has also been noted by explaining it as "dialectical" rather than "unilateral" (Poulson, Avramidis, Medwell, & Wray, 2001); therefore, practice does not always come after beliefs. Although prescriptive approaches may contribute to novice and pre-service student teachers during their initial training to make appropriate decisions (Davis, 1999), resistance may be observed to these prescriptions for various reasons eventually (e.g., students' learning, the efficiency of the method in the class), which may be conducive to dissonance and leaving the course for less dissonant contexts (Galman, 2009; Ghasemi, 2018). Therefore, attempts should be made to resolve and consider tensions between teachers' prior experiences, beliefs, and conceptions of teaching in prescriptive contexts, which may result in dissonance to improve our understanding of the importance of creating a congruent connection between prior beliefs and practice in yielding efficient teachers.

While possible explanations for dissonance have been proposed,

namely, "a recent change in teachers' teaching strategies, some confusion associated with that change, and inability to reflect on their own teaching in ways that challenged the teaching approaches in their department" (Postareff, Katajavuori, Lindblom-Ylänne, & Trigwell, 2008, p. 59), we, still, see few critical and reflective actions toward such prescriptive approaches and complex tensions or dissonance in language departments, which signify a need to further examine teachers' beliefs in order to clarify how they affect their practices. More specifically, teachers' individual preferred teaching styles and the demands of the teaching environment and students are not always congruent in a way that they would support each other. Sometimes friction between teachers' teaching styles, teaching environment, and learners' learning styles might lead teachers to develop dissonant ways of dealing with their approaches and strategies (see Postareff et al., 2008).

As mentioned above, studies on the discrepancy between teachers' beliefs and practices need to be expanded, particularly in Iran, which concerns the congruity and sometimes incongruity between their beliefs and teaching. For instance, positive correlations between developmentally appropriate or inappropriate reported beliefs and reported practices have been confirmed (Charlesworth, Hart, Burts, & Hernandez, 1991). According to Fang (1996), inconsistencies between teachers' beliefs and practices, which can be due to the complexities of classroom life, may constrain teachers' abilities to follow their beliefs and provide instruction that is aligned with their theoretical beliefs. These inconsistencies have been spotted by researchers who recognized the mismatch between what teachers say during interviews and what they demonstrate during observation (Ghasemi, 2018).

Recently, the consistencies and inconsistencies between the Iranian EFL teachers' beliefs and practices have been investigated, which emphasized the impact of prior experience on teachers' instruction and beliefs and provided some causes of inconsistencies (e.g., syllabus change, less adept students, the situational constraints, etc.). Furthermore, Ghasemi (2018) discussed the nature of teachers' beliefs by investigating the relationship among beliefs, knowledge, and practices to explain the inconsistency between teachers' beliefs and practices. Employing questionnaires, interviews, and observations, he found that teachers' classroom practices are totally different from their stated beliefs due to the experienced cognitive dissonance in contexts

with prescribed methodology.
In short, this book aimed at identifying these tensions in teachers with or without academic/pedagogical knowledge, who receive or implement contradictory instructions, recognizing the possible resolution they adopt in encountering such tensions and incoherence imposed by certain institutional principles, and understanding the possible impact of dissonance on teachers' practices and teachings, which is the most susceptible factor attached and connected to their belief system. Now, we turn to hypnotic suggestion, which according to Lundh (1998), may influence a person's emotional state.

III. PSYCHOLOGICAL CONSIDERATIONS

In this section, research on the hypnotic suggestion, suggestibility, and psychological processes that could alter our emotional state and influence our performance will be presented with a specific focus on children. Also, an introduction to learned helplessness with related literature will be followed.

1. Suggestibility and Hypnotic Suggestion

1.1. The nature of suggestibility and hypnotic suggestion

Hypnotic suggestions are not only verbal, spoken, or read, but also a smile, a glare, a wink, a three-piece suit, and a scientist's white coat, which may function as suggestive devices that imply more than the immediate action. When influenced by hypnotic suggestion, you may exhibit behavioural compliance without private acceptance or belief. In other words, your actions become inconsistent with your own desire and belief system and natural, unhindered actions. This could hinder the autonomy, expression, or self-determination of an individual. It could equally supersede emotions with rationally chosen, deliberate, long-term results.

The two constructs (hypnotic suggestion and suggestibility) have much in common and even interchangeable usage, but to be more specific, we will consider each in detail to spot the differences and similarities inherent in them by citing the definitions and opinions provided by experts. Therefore, suggestion and suggestibility are linked

but distinct concepts, with the latter generally resulting from the former. First of all, suggestion, which seems to be the prominent concept utilized by psychologists as an influencing tool, has been advanced by the various definitions provided by different researchers. It played an important role in early psychological theory and research. Its definitions are many and varied, reflecting the difficulty in pinning down this pervasive yet perplexing aspect of human behaviour. The concept of suggestion was introduced in 1888 as a fundamental principle for the explanation of hypnosis by Bernheim. Sidis, who through considering his experience in employing suggestion as a hypnotic tool, specifies suggestion as:

> *The intrusion into the mind of an idea; met with more or less opposition by the person; accepted uncritically at last; and realized unreflectively, almost automatically. (1998, p. 15)*

Stern defines suggestion from the influenced individual's viewpoint as:

> *The imitative assumption of a mental attitude under the illusion of assuming it spontaneously. (1910, p. 273)*

In another perspective, Titchener describes suggestion as:

> *Any stimulus, external or internal, accompanied or unaccompanied by consciousness, which touches off a determining tendency. (1910, p.450)*

According to this definition, suggestion is a kind of command or a sensory stimulus, which after the corresponding response to it, we must assume that a tendency or a disposition has already been prepared and it may be touched off by the appropriate word, gesture, or other stimuli. So, any reaction is a response to a suggestion according to this definition. However, Bunnermann (1913) considered suggestion as a mental state of expectancy or emotional disturbance and an unusual working function of interpretation due to expectancy or emotional disturbance. He regarded suggestion as a temporary emotional disturbance in which expectations stimulate it, so suggestion may cause emotional arousal, which negatively affects our behaviour in a short time period. However, Titchener not only considered suggestion as either external or internal, but also a usual tendency in human nature.

Gheorghiu emphasized the susceptibility of human beings to

suggestive elements in his interpersonal relationship with others and argued that:

> *Depending on the specific situation and habitual factors, every person turns out to be susceptible to suggestive modes of influence, and no field of application dealing with interpersonal relationships can seriously do without considering the mechanisms of suggestive factors. (1989, p. x)*

Similarly, Schwanenberg (1993) maintained that all individuals utilize suggestions in an attempt to influence others, particularly psychologists, doctors, teachers, parents, friends, and politicians. As a result, suggestive forms of influence are ubiquitous in human interpersonal processes.

By criticizing the definitions provided by Titchener and Bunnermann, Gault defined suggestion not as:

> *A direct appeal such as a command issued by one person to another, nor as a sensory stimulus other than a command which immediately awakens a reflex motor response or a mental reaction, but as an indirect appeal which awakens a determining tendency in such a way that the subject has more the sense of acting on his own initiative than of responding to external influence. (1919, p. 187)*

There is, however, a popular definition of suggestion as to the transmission of a conviction or an idea from one person to another. Therefore, in these definitions, two concepts of stimulus and dispositions or tendencies of human nature should be sufficiently identified (Gault, 1919).

The other closely related concept is suggestibility, which was defined by Sidis, one of the major characters whose work "The Psychology of Suggestion" gave rise to the topic, as:

> *A peculiar state of mind which is favourable to suggestion. (1998, p. 15)*

In addition, suggestion has been classified according to the mode it is effected in consciousness by Sidis (1998) as a direct suggestion and indirect suggestion. In a direct suggestion, the experimenter gives his/her orders or suggestions directly without beating around the bush,

without any circumlocution, and without any evasions. In a plain manner, the hypnotizer gives his suggestion, so that it partakes of the nature of an imperative command issued by order of the highest authority from which there is no appeal. The essential feature here, however, is not the degree of the authoritativeness because, in many cases, it may be totally absent, and a courteous bland way of expression may be used. However, in indirect suggestion, the experimenter produces some object by making a movement or a gesture, which tells the subject what to do in their own silent fashion. This mode of influencing the mind plays a great part in the history of humanity and is therefore of great importance in sociology.

Furthermore, Eysenck (1947) proposed three types of suggestibility: primary, secondary, and tertiary. Primary suggestibility describes an ideo-motor phenomenon whereby thinking about or imagining one's body moving can cause it to occur. This has been demonstrated experimentally in the body sway test, arms lowering, and pendulum tests. Primary suggestibility correlates highly with hypnotizability and neuroticism. In contrast, secondary suggestibility is linked to indirect suggestions where the purpose of the suggestion is not clear. It is not related to hypnotizability and is negatively related to intelligence. The tertiary suggestion is connected with attitude change and persuasion, emphasizing the importance of interpersonal factors such as the perceived authority of the person providing the suggestion.

1.2. The development of research on suggestibility

In this section, we will focus on individual differences in suggestibility and the association of suggestibility with biological, cognitive, and psycho-social factors, specifically among children.

Gender

According to the various research, which has been conducted to understand the relationship of suggestibility with gender, there seem to be discrepancies among the results of the studies. For instance, McFarlane et al. (2002), examining misleading questions, reported that girls were more suggestible than boys. However, Crossman's (2001) results indicated that boys (younger than 56 months) were more suggestible than girls. It seems safe to conclude that there are no consistent gender differences across a wide age span in children's suggestibility (Bruck & Melnyk, 2004).

Language abilities

Suggestibility has been considered the predictor of language ability, and various studies included a variety of tests to assess vocabulary, receptive language, and expressive language. In some studies, only one measure per study of language ability has been included, and a few studies used more detailed batteries to comprehensively evaluate children's language skills (e.g., Ghasemi 2021a).

Clarke-Stewart et al. (2004) used the Adaptive Language Inventory as a language measure and Misleading Questions as the suggestibility measures to understand their correlation. The study indicated a significant correlation between the two variables. As a result, significant relationships between language and suggestibility were obtained if a comprehensive language battery was used to measure verbal abilities. However, according to Bruck et al. (1995), who used the Peabody Picture Vocabulary Test as the language measure and the Misinformation as the suggestibility measure to find their correlation, vocabulary did not associate with suggestibility. No significant effects were obtained when single measures of language were used (Bruck & Melnyk, 2004).

Theory of mind

Briefly, the theory of mind refers to a cognitive capacity that allows us to know that others may have different feelings, intentions, and beliefs. Much of the research shows that this skill develops rapidly in preschool children so that by the age of five, most children come to understand that two individuals can hold conflicting beliefs about the world (Astington, 1993). There seems to be a parallel developmental increase in the theory of mind and reduction of suggestibility within the same age range. The basic premise is that once children come to appreciate that another person can hold a belief that is different from one's own, then one can more easily reject it (as in misinformation).

The results of only two studies among numerous ones yielded positive correlations between increases in suggestibility and theory of mind. First, Templeton and Wilcox's (2000) results, which are based upon correlations in a sample of 3 to 6 years old and false belief as to the theory of mind tasks and misinformation as the measure of suggestibility, indicated a positive correlation with high suggestibility and high theory of mind. In another study, Welch-Ross (1999) reported that children who passed theory of mind tasks did not show

suggestibility effects when the suggestions were delivered by an unfamiliar interviewer, but their suggestibility increased when interviewed by a familiar interviewer (who read the child a story and then gave misleading information). However, Roebers and Schneider (2004), who used false belief as the theory of mind tasks and misleading questions as the measure of suggestibility, reported no significant correlation between the two variables (Bruck & Melnyk, 2004).

Behavioural ratings of distractibility

Researchers have examined the predictive power of parents' or teachers' ratings of children's distractibility, reflectiveness, and persistence. The assumption is that distractible children will not effectively process information and, therefore, confuse actual experiences with suggested misleading information or may impulsively assent to misleading questions.

Some studies included parent and teacher ratings of distractibility, persistence, activity, and attentiveness. Clarke-Stewart et al. (2004) used the CBQ: Inhibitory control (parent-rated) as the measure of distractibility and misleading questions as the measure of suggestibility with five years old children. The results displayed no significant correlation between the two variables.

However, Purdy (2001) used CTS: Distractibility (parent-rated) as the measure of distractibility and source monitoring questions as the measure of suggestibility with children 5–8 years old. The result indicated a positive correlation for children in low-pressure interviews. The other studies have indicated that there is no specific relationship between suggestibility and distractibility, at least for children in the age range of 5 to 8 years old (Bruck & Melnyk, 2004).

Self-concept/self-efficacy

Self-concept-Self-efficacy measures were obtained through the parent, teacher, or child ratings on various instruments, and the major measure of suggestibility used in these studies was misleading questions. For example, Davis and Bottoms (2002) found that children who felt confident about telling an adult he or she was wrong succumbed to a few misleading questions if the children were older than 6.5 years and if a supportive interviewer interviewed them. In other words, a supportive interviewer increased older children's feelings of self-efficacy, which in turn lowered suggestibility. Also, Burgwyn-Bailes et

al. (2001), studying the correlation of self-efficacy and suggestibility with the Children Self-View questionnaire as the measure of self-concept and misleading questions as the measure of suggestibility, found a negative correlation and association between high achievement motivation and low suggestibility among 3–7 years old children. In other words, children who have high motivation are less susceptible or suggestible.

Stress/emotional arousal/state anxiety

Various studies have examined the effects of children's emotional arousal during the target event on their later suggestibility. In most cases, children underwent a variety of stressful medical procedures (e.g., venipuncture, inoculation, facial laceration repair) and later answered suggestive questions about the procedure. During these medical procedures, stress ratings or anxiety levels were assessed and then correlated with the children's later memories. In some cases, the suggestibility of children who underwent stressful procedures was compared to the suggestibility of children who did not undergo the same procedures. Significant associations between stress, emotional arousal, and suggestibility were obtained by Marche and Loehr (2004). They used Colored Analog Scale and Facial Affective Scale as the measure of state/emotional arousal in a medical procedure with children of 8–16 years. They reported a negative correlation between the two variables. However positive correlation has been achieved by Burgess (2000), who used mood induction: happy, angry, or sad as the measure of state/emotional arousal in an interactive event with 4–6 years old children. He found that children with negative emotions are more suggestible than those with positive emotions. Sad children were the most suggestible subjects (Bruck & Melnyk, 2004).

Finally, Ghasemi (2021a) examined the correlations between students' emotional intelligence and their hypnotic suggestibility. Resulting in a negative association. These studies are the appropriate signal to understand and identify the correlation and importance of emotions, emotional intelligence, suggestion, suggestibility, and educational context in students' ultimate success and performance with various doses of these constructs (see Ghasemi, 2021a).

2. Learned Helplessness

Learned helplessness is a term coined by Seligman, a behavioural

psychologist, to describe his theory that helplessness is a learned state produced by exposure to unpleasant situations from which there is no possibility of escape or avoidance. It has been argued that when people give up, they generalize its consequences to other situations, which eventually would lead to helplessness and apathy.

Furthermore, this generalization of expectations and uncontrollability across time and tasks depends on the attributions an individual makes for their failure (Abramson, Seligman, & Teasdale, 1978). This means that the way we attribute our failure and consolidate it in our cognition and attitude could directly undermine our performance in future similar situations or under different circumstances just because of the prolonged attributed attitude and already shaped self-beliefs. The study of learned helplessness bridged to human subjects from animal models through the sentinel work of Thornton and Jacobs (1971), who concluded that individuals transferred their perceptions of helplessness learned during one situation to subsequent tasks, thus supporting how situational helplessness could indeed transform into habitual helplessness. Then, the learned helplessness theory, which was introduced by Maier and Seligman (1976), was understood to occur initially when an individual perceives a situation as unfavourable, stressful, or challenging.

In fact, after following multiple failed attempts to influence the stressful and challenging situation to an outcome desired, an expectation of response-outcome independence is learned by the individual, which is a key assumption of the learned helplessness theory and indicates a lack of relationship between the individual's behaviour and the outcome in the future (Alloy & Seligman, 1979). After developing frustration within the learner, which is related to perceived uncontrollability and unpredictability of the experienced outcome, she/he learns this independence that reduces the likelihood of attempting to initiate a response in the identical future or related episodes. In other words, the assumption underlying learned helplessness theory is that the motivation to initiate voluntary responses is produced by the expectation that is responding produces relief, and learning an outcome is independent of response makes it more difficult later to learn which responses produce what outcomes (Maier, & Seligman, 1976). As an individual experiences a situation he/she is unable to change or control through repeated failed attempts or to manipulate the undesired stimulus, a decline in motivation,

cognitive deficit, a heightened state of negative emotions are experienced (Seligman, 1975).

Learned helplessness theory was later reformulated to the theory of helpless attributional style, which suggests that an individual's attributional style that is their general tendency to generate similar casual explanations across events is useful for explaining why some individuals who are exposed to failure events over time develop negative psychological symptoms like depression while others do not (Peterson, Maier, & Seligman, 1993). Attributional style can be broken down into one of two types of responses to an aversive event. When a bad event occurs, individuals will ask themselves why this event happened. The nature of their answer sets the parameters for the helplessness that follows. Suppose the individuals behold a causal attribution that is stable (this is going to last forever), global (this is going to undermine everything) and internal (this is all my fault). In that case, they are more likely to experience a negative and depressive mood reaction than the individuals who typically attribute negative outcomes to unstable (this will not last long), specific (this was just a once-off), and external factors (the problem was just too complex) (Peterson & Vaidya, 2001).

Specifically, perceived helplessness can be conceptualized as the psychological state resulting when an individual recognizes that he/she cannot alter outcomes of personal events despite his/her own interventions. This perception is the main concern of this book for which we are going to present a solution to change the perception and view of learners to bridge responses and outcomes again to reduce various forms of psychological morbidity associated with helplessness, namely fear, anxiety, and depressive symptoms in an educational setting in hopes of further understanding of its remedy to optimize psychological health and learning.

Within the educational sphere, Bandura's (1986) theory of self-efficacy, which has been defined as how students will judge their own capability in a given situation, seems to act as a predictive measure of learned helplessness. Like learned helplessness, students with low self-efficacy will determine their own ability and react with thoughts and emotions that support this self-belief (Hamilton & Ghatala, 1994). Perceived self-efficacy, which represents an individual's perception of how he/she is capable of performing a specific activity or task, predicts whether a specific activity will be attempted and determines how long

the individual will persevere in the face of significant challenges (Coyne & Smith, 1994).

Also, Firmin et al. (2004) studied the negative effects of learned helplessness on test-taking by administering tests in alternative manners. However, not all research projects suggest that the helpless attributional style has a negative effect on performance. Work by Houston (1994), originating from three independent studies, indicates that undergraduates with helpless attributional style can be more determined at examinations and, hence, have superior performance than non-sufferers.

As mentioned before, many pieces of research on learned helplessness and helpless attributional style simply measure them and their effects (Houston, 1994; Firmin et al., 2004). There is an apparent gap in the research by just measuring and observing learned helplessness with no specific attempts to overcome these problematic interferences in the classroom.

2.1. Research on learned helplessness

There have been frequent studies conducted to understand the effect of LH in academic fields and educational psychology (e.g., Ghasemi, 2021b, 2021c, Ghasemi & Karimi, 2021). For instance, Mikulincer (1988) found that while experiencing modest initial failure by subjects enhances their subsequent performance, experiencing initial low or high failure diminishes and reduces the following performance. Also, Kamins & Dweck (1999) reported on the effect of different forms of criticisms (person and process) and praises (person and process) on students' helpless responses. Students who received personal criticisms like "you disappointed me" considered their mistakes more like a failure by feeling not skilful and were less persistent on tasks than those who received process criticisms like "try another way". In addition, the effects of teachers' feedback on students' task persistence and self-perceptions have been studied by Heyman, Dweck, and Cain (1992), which indicated that when children are more susceptible to experience helpless behaviour patterns, their tendency to adopt teacher's more negative evaluation and lose their positive perceptions increase than children who are less susceptible to experience helpless behaviours. In another study by Schunk (1982), it was found that past attributions like "you have tried hard" enhanced students' academic achievement and self-efficacy more than those who received future attributions like

"you should try hard" and those who received no feedback. Consistent with these studies is the role of helpless perceptions and self-esteem, which has been found to be a positive relationship (El-Anzi, 2005).

Recently, Ghasemi (2021b, 2021c) has investigated the efficacy of specific motivational interventions (e.g., vision-based programs) to improve students' learned helplessness and academic achievement, resulting in positive improvements and changes in students' attitudes and academic achievements. According to him, teachers' practices could significantly promote or reduce students' helpless attitudes in schools.

Based on these studies, the prominent role of teachers and their practices is evident in students' academic success and motivation. For instance, Wentzel (2002) compared teachers with good parents and concluded that students' perceptions of teachers' behaviour and expectations are significantly correlated with their success and were strong predictors of their future mastery, goal pursuit, and interest in the class. He found that teachers' high expectations had an academic facilitative effect and low expectations had a negative impact on their performance. Overall, negative feedbacks, harsh personal criticisms, and teachers' low expectations appear to develop helpless behaviour patterns in students, influence their academic achievement, and reduce their self-efficacy.

PART TWO

SAMPLE EMPIRICAL STUDIES

IV. HYPNOTIC SUGGESTION AND EMOTIONAL INTELLIGENCE

The links between suggestion and emotional intelligence in yielding successful performance in academic fields, including institutes, is considered a significant inquiry as new research studies are continually added to the field. Although it has already been established that emotional intelligence has a positive impact on performance, research on the impact of suggestion on emotions, and emotional intelligence specific to students still requires consideration. Since emotional intelligence is a learned trait, this is especially important to notice and consider the acknowledged effect of suggestion on students' learning by making them emotionally stable or intelligent to avoid them falling woefully behind the majority of their international counterparts. The purpose of this study is to investigate the impact of suggestions on the emotional intelligence of intermediate EFL learners and to determine whether this would affect their reading comprehension. Participants in this study were a sample of intermediate EFL learners studying English in a language centre, and 30 out of 85 were qualified to be in the intermediate level of proficiency after taking a general English proficiency test. They were randomly split to form three groups, and each group received a specific suggestion. Data were gathered through two questionnaires and a reading test and were analyzed through descriptive and inferential statistics, correlations, and multiple regression.

The results revealed that the students who received positive

suggestions outperformed other students. Also, students with a high level of emotional intelligence showed a higher reading ability than those with a lower level of emotional intelligence. Moreover, the results of the correlation between suggestibility and emotional intelligence and their predictive relationship with reading comprehension have been discussed and analyzed. We will discuss each step in detail in the following sections.

1. Concepts and Connection

1.1. Emotional intelligence

The scope and purpose of the educational and learning processes have been heavily modified under the influence of psychological breakthroughs and their developmental perspectives in recent decades. From the beginning of psychology, there has been a mutual interest in language and psychology (Cowles, 2011). Lazarus (1991) considers the central role and significance of emotion in humans' life and specifically the psychological aspects of emotion, which is the core of their learning. It seems inconceivable to take an approach to the mind or human adaptation in which emotion is not a key component. Emotions are a complex, patterned, organismic reaction to our endeavours to survive, flourish, and achieve our objectives. Additionally, emotions are not similar to other psycho-sociobiological constructs since they express the intimate personal meaning of what is happening in our social lives and combine motivational, cognitive, adaptational, and physiological processes into a single state that involves several levels of analysis. He also thinks of emotions as information about a person's relationship with the environment, which can be triggered when the person-environment relationship changes. Understanding the significance of emotional states concerning the person-environment relationship contributes to attention, decision making, and behavioural responses (Damasio, 1994). For optimal social functioning, like expressing socially appropriate emotions and behaving in socially acceptable ways, effective emotional management is emphasized (Gross, 1998). Thus, the significance of emotion was noticed and emphasized by several scientists and psychologists who considered its complex nature from different perspectives to speculate theories, namely phenomenological, behavioural, physiological, cognitive, and other recent theories such as social and clinical that fund its theoretical basis (Strongman, 2003).

The evolution of the theory of emotional intelligence began when psychologists realized that intelligence per se is connected to cognition and is not susceptible to change. Psychologists attempted to find an alternative way to measure intelligence by considering other inherent variables and capabilities involved in humans' capacity to be assessed as intelligent. The prominence of other factors that were mainly non-intellective like affective and conative abilities was noticed by Thorndike in 1920. He introduced the concept of social intelligence, which was questioned by Cronbach (1960) about its undefined and unmeasured nature. After much contributions by other researchers and psychologists like Gardener and his notion of multiple intelligence, two psychologists Peter Salovey and John Mayer who were intrigued and captivated by these findings conducted some research studies and ultimately introduced the concept of emotional intelligence. By considering it as a subset of social intelligence, they defined emotional intelligence as:

> *Ability to monitor one's own and others' feelings and emotions, to discriminate among them and use this information to guide one's thinking and action. (Salovey & Mayer, 1990)*

It was popularized in 1995 by Daniel Goleman's book, "Emotional intelligence: Why it can matter more than IQ". In this book, he considered emotional intelligence "as powerful, and at times more powerful, than IQ" in predicting success by explaining and providing evidence on how people with good IQ sometimes fail and those who were school dropouts and considered stupid go on to become the most successful ones in their fields (Goleman, 1995). Therefore, emotional intelligence refers to an ability to identify the meanings of emotions and their interactions with reason and problem-solving on the basis of cognitive processes. As Lawson (n.d.) mentioned, learning occurs in the brain by cognitive processes that are connected and directed by our emotions and feelings and prove a bi-directional and complex relationship.

Accordingly, as positive emotions could motivate and contribute to effective learning, negatively perceived emotions may inhibit or affect learning and cognitive processes involved in learning. Students may optimize their learning by enhancing their emotional intelligence and recognizing their emotions and their significant effect on their learning, which function as a response to the environment. Since emotions play

a crucial and determining role in the quality of our cognitive and learning processes, efficient performance, and ultimate success, it is imperative to ponder on them and develop or direct them on the appropriate track to meet our goals and needs, particularly in our educational pursuit and, above all, be an emotionally intelligent and stable person. Emotional intelligence is a dynamic construct influenced by diverse biological, psychological, and social factors. Empirical studies suggest a significant correlation of emotional intelligence with numerous psychological and psychosocial elements that prove to have a remarkable impact on various aspects of individuals' interpersonal relationships, academic achievement, stress management, personality improvement, and other psychological issues. For instance, considering biological factors like age and gender, it has been reported that emotional maturity was positively correlated with physiological maturity (Salovey & Mayer, 1990; Goleman, 1995). Also, according to studies, the relationship between gender and emotional intelligence has been mostly confirmed to the benefit of females (Austin et al., 2006; VanRooy et al., 2005), and male candidates had indicated high EQ in some studies too (Carr, 2009; Hunt & Evans, 2004). The influence of psychological elements on emotional intelligence has also been certified by some studies that regard variables such as depression, anxiety, optimism, internal psychological health, stress, self-esteem, problem-solving skills, and creativity for their significant impact on individuals' emotions (Brown & Schulte, 2006). Such issues have been considered potential predictors of emotional intelligence, emotional health, and the successful performance of a person with regard to various learning and life situations (see Ghasemi, 2021a). The effect of the social factors on emotional intelligence has been noticed by several researchers who have chiefly considered the socioeconomic and locale in association with humans' emotional orientation.

For instance, a study by Mohanty and Devi (2010) indicated a positive and significant effect of education and occupation of parents on the interpersonal relationship of adolescents. Additionally, it has been suggested that individuals from different sub-cultures approach emotions differently (Mayer & Salovey, 1997). Researchers have spent considerable time and energy trying to identify and elaborate on emotion and emotional intelligence, which play a critical role in directing our daily interpersonal and/or intrapersonal relationships as well as coordinating our cognitive processes in association with a

specific preconceived understanding of the task that shape and guide our emotions and, ultimately, control or regulate the efficiency of our learning and performance. There still remains one emotional, psychological, and interrelated component and factor whose effect on emotional intelligence has not been determined or specified yet, and it seems timely and important to launch research to investigate another underlying construct involved in intelligence, memory, personality, and emotion.

1.2. Hypnotic suggestion

We are hugely influenced by the information we provide for our cognitive system to be processed, which eventually could be led to an uncontrolled and unintended action, only by triggering and provoking a potential desire, need, feelings, imagination, anticipation, hypothesis, motivation, personal experience, acquired beliefs, recollections, perceived situation, and emotions intentionally or unintentionally by ourselves or specifically by others. The effect of the hypnotic suggestion would be clearly exhibited in the person's overt behaviour and performance. This influence could automatically stir a person to move to process a sequence of emotions along with a specific triggered stimulus that is realized in his/her behaviour. Hypnotic suggestion or suggestibility is just one of the prominent psychological notions that may implement and manifest such a potential influence on a person besides other scientific and psychological methods like hypnosis. According to Lundh (1998), it was introduced as a fundamental principle for the explanation of hypnosis by Bernheim (1888) and became one of the important and primary constructs of psychological theory and research that operates on various levels of people's psychological functioning, such as perceptual, behavioural, cognitive, emotional, and motivational.

Primarily, we should emphasize and prove the importance of suggestion in education and language learning by considering it from two broad perspectives, theoretical and applied. Theoretically, suggestion, according to the influential factors presented above, could be considered a continuum of cognitive, psycho-emotional, and psychosocial factors that may contribute to the process of suggestion regarding the person's respective psychological, emotional, and cognitive orientation. It may be observed that a person is suggested on the basis of memory deficiency and wrongly incorporate a suggestion,

simply, because he doesn't remember the argued event. Therefore, we may enumerate factors like hypothesis (interpreting and theorizing), personal experience, anticipation, and recollections comprising the cognitive dimension of suggestion, and interrogative suggestibility where a person is influenced by leading questions as an example of cognitive suggestibility. Furthermore, effective and emotional factors interacting with the psychological state of the person could be manifested in an examination situation when his emotional state is intensified by a simple peer-suggestion or self-suggestion and ultimately ends with psychological stress. Thus, we may name factors like feelings, imagination, and emotions that involve psycho-emotional dimensions of suggestion. John Kappas recognized three different types of suggestibility in his lifetime (1925–2002), among them emotional suggestibility is characterized by a high degree of responsiveness to inferred suggestions that affect emotions and concludes that emotionally suggestible students learn more by inference than by direct, literal suggestions. Finally, in the psychosocial state, simply a person considering the social norms in a class adopts a suggestion in order to defer to or comply with the schedule of his classmate by regarding himself/herself as subordinate, which may lead to low self-esteem in extreme cases. Lundh (1998) emphasized the role of the environment in hypnotic suggestion by declaring that:

> *Some ideas, intentions, feelings, etc., will be primed more frequently than others, which means that each person's social environment will implicate a certain suggestive climate. (p.28)*

The factors that affect suggestion from social aspects may consist of desire, need, motivation, acquired beliefs, and perceived situation (see Bruck et al., 1995). On the other hand, applied perspective on suggestion, particularly in the classroom and reading proficiency, may be an effective tool for a teacher by identifying individuals' suggestibility levels and acting or using specific techniques according to the provided data (Ghasemi, 2021a). For instance, a teacher through spotting students who are most prone to his/her suggestion should attempt to use this potential characteristic to enhance learners' motivation, desire, and passion for learning effectively. Accordingly, certain techniques that may inhibit the learning process and expose them to negative suggestion, even unintentionally, should be seriously considered as the main cause of psychological and mental inhibition

by creating false beliefs. Also, emotional contagion may occur simply by a student or teacher expressing his/her ideas and emotions on particular events or occasions and eventually influencing another student to enter the same emotional domain, the state that I call peer-suggestion. It is possible, for example, that a teacher who expresses hope and optimism in a positive emotional manner may thereby influence his/her students' emotional state in the same direction. Thus, positive or facilitative suggestions may influence the motivation of a student by instilling a certain desire, motive, or need in his/her thought to be developed.

Additionally, the emotional state (demands on emotional intelligence) of students may be stimulated, directed, and induced to act toward a specific expectancy or as an emotional response to a particular expectation and perceived situation. As Kirsch (1985) demonstrated, these expectancies tend to be self-fulfilling, which means that a student's anxiety or stress about a future perceived situation (i.e., final examination) may carry over or respond to his expectations and affect his performance. In fact, our induced expectations constitute our emotional and practical outcomes.

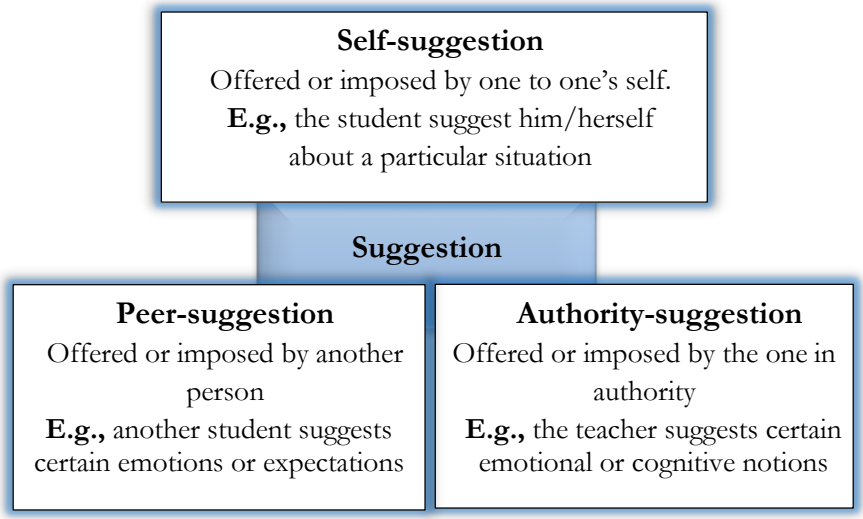
More specifically, the function of suggestion in the process of learning could be easily manifested through the extensive suggestions that have been frequently used to enhance motivation for learning, concentration, study skills, creativity, reading ability and overcoming text anxiety or enhance overall academic performance. In particular, it has been used to reduce generalized anxiety and test anxiety. It has been attested that excessive anxiety lowers intellectual efficiency and may impair the performance, but suggestion, especially learning self-hypnosis skills, gives students a self-management tool (Hammound, 1988). Consequently, the utilization of suggestions may yield facilitative, negative, or debilitative effects, and its entire lack in the classroom may be assumed as the inadequacy of the teaching and learning process.

In an attempt to deconstruct autosuggestion and establish a disciplined approach toward suggestion by identifying educational contexts as the principle construct, I have classified it into three subordinate parts namely, peer-suggestion, self-suggestion, and authority-suggestion; the last two components seem to have a predominant and interrelated role in determining students' performance toward the best or worse in a particular task. Some

teachers may deny acting so adversely by implanting such debilitative thought on their students' unconscious minds, which straightly manifests itself in their consciousness and performance. I shall admit that they are absolutely right since they commit it unintentionally by suggesting such undesirable ideas about the difficulty of the course, final examination, strict principles on regularity, and attentiveness. Even the formality of their speech and physical action could be a source of negative suggestions altering their students' state of consciousness and directing them toward the predetermined and predisposed destiny of incapacity in the presentation of their potential, proper talent, and functionality (of course in highly suggestible students). The following diagram (Figure 6) represents a better view of the classification of suggestions in this study.

Figure 6.

Components of Hypnotic Suggestion Based on Autosuggestion Concept



We can now verify the eminent influence of suggestion on provoking emotions and affective variables involved in human personality. However, we are not sure that students with high EQ (emotional quotient) may utilize their intelligence to overcome and identify the effect of unwanted suggestions by interpreting them in an appropriate

way to control their emotions and conscious mind. Next, we turn to reading comprehension as a manifestation and practical representation of the interaction effect between emotional intelligence and suggestion.

1.3. Reading comprehension

Considering reading comprehension as a basic life skill that is directly connected to students' academic growth and personal fulfilment, it is a fundamental and essential skill that demands our attention (Anderson, Heibert, Scott, & Wilkinson, 1985). When we are talking about reading, actually we are discussing the primary source of human knowledge and the process of transplanting the true meaning of insubordinate understanding in our thought. In other words, reading involves language, memory, thinking, intelligence, and comprehension (Sternberg, 2003). But, to read efficiently and proficiently, we also may need emotion, passion, motivation, and be psychologically prepared for an upcoming reading task. Of course, the mentioned elements have been acknowledged, complemented, and implemented by different researchers and practitioners; this study will mainly consider reading comprehension as a fragment and the most important skill of overall achievement of students that may be influenced by different factors during the process of comprehension.

In the past decades, there has been an exponential increase in research on reading comprehension instruction, reading strategies, reading difficulties, comprehension skills, and monitoring reading proficiency. Researchers have consistently found that students' perceptions of their academic capabilities are strongly related to their actual proficiency (Bandura, 1997). Furthermore, there have been studies conducted on discerning the possible relationship between emotional factors and reading comprehension to reveal the universal dominance of humans' emotions in their educational pursuit and studying. These studies have contributed to our understanding of the process of reading comprehension and potential factors that may facilitate this process or inhibit it. Unfortunately, reading as a source of linguistic input has been perceived as a difficult skill to acquire due to various cognitive, emotional, and social factors such as distractions, false beliefs, wrong attitudes, lack of motivation, induced difficulty, and other social and cultural considerations formed and reasoned by students. Nowadays, students are taught various strategies to

overcome this demanding task, particularly in an examination setting. We may distinguish reading to fulfil a requirement (e.g., a test) from reading for self-knowledge. Therefore, the purpose of the reading can not only influence our comprehension, intelligence, strategies, motivation, and cognitive processes, particularly in an examination context, but also its huge impact on our perceived understanding and emotional involvement of the task should be recognized.

Students use different learned or acquired strategies consciously and unconsciously in their approach to a specific text with some expectations and perceived difficulty, which stimulate a continuum of emotions by interpreting data gleaned from their environment and rationally processing them to achieve a conclusion that ultimately affects their performance. This conclusion may be repressed, altered, and alleviated entirely on a conscious level by emotionally intelligent students to assist them in their endeavour, but inhibit or diminish others' performance who appear to have trouble in controlling their emotions at the conscious level. However, the repressed thought at the conscious level may continue and resist at the unconscious or subconscious level even after the accomplishment of the task. This process may be even accelerated by providing false or uninvited data to our intellectual system by others to plant and depict a wrong and predetermined outcome. Therefore, suggestion may be a reinforcing element in managing our emotions to work for us in anticipating the desired outcome.

It is hypothesized that if students are empowered emotionally and cognitively to believe in their capabilities and diminish the role of the test as a determining factor in their overall assessment and not suggest the assumption of its difficulty, their performance may be enhanced for the lack of negative emotional burden and by creating an enthusiasm for the task to be accomplished perfectly. Multon et al. (1991) provide support for the hypothesis that self-efficacy beliefs facilitate improved academic performance (e.g., standardized achievement tests, classroom-related materials, and grades) and task persistence (e.g., time on task, items attempted/completed, number of academic terms completed).

In addition, readers' self-perception seems to be an appropriate model to demonstrate a direct relationship between students' perception of the task and their self-efficacy and performance. RSPS Scale was developed by Henk and Melnick (1995) to measure students'

perceptions of reading self-efficacy and to reflect the four basic factors students take into account when estimating their capabilities as a reader. The four factors are embedded in Bandura's basic model of self-efficacy, including:

> **Progress:** *How one's perception of present reading performance compares with past performance.*
>
> **Observational Comparison:** *How a child perceives his or her reading performance compares with the performance of classmates.*
>
> **Social Feedback:** *Includes direct or indirect input about reading from teachers, classmates, and people in the child's family.*
>
> **Physiological States:** *Refers to internal feelings that the child experiences during reading. (1995, p. 472)*

As you may notice, our perceptions along with our emotional state, whether nurtured by ourselves, parents, or teachers, may contribute to our performance. Therefore, we may improve students' reading comprehension by understanding and nourishing their emotions, passion, perception, motivation, and sources of proper suggestions. It does not make sense to blame students for having poor abilities or for making an insufficient effort before considering other important factors in the process of teaching and learning reading, like inappropriate attitude, inattention, perceived difficulty, and lack of emotional involvement.

Consequently, reading efficacy and self-efficacy could be the realization of our emotions and depend on other cognitive processes like intelligence in using strategies besides emotional processes like intelligence in directing our emotions in the right route to enhance our proficiency. As Bandura (1982) pointed out, an individual's beliefs about their capabilities can influence his motivation and behaviour. Along with other influencing factors in determining reading comprehension like cognitive and contextual aspects, this study will mainly investigate the emotional and psychological processes involved in reading processes by particularly considering suggestion and emotional intelligence as the authoritative elements with potential consequences.

1.4. Purpose of the study

This study aims at investigating the interaction effect of suggestion and emotional intelligence on reading comprehension tasks. More specifically, the study examines how Iranian students' suggestibility level and their emotional intelligence may inhibit or contribute to the process of reading comprehension. Although it is found from the literature that many factors have been identified affecting the emotions of students and their performance, a few studies are available relating to the application of hypnotic suggestion among school students that also consider their emotions during and after the process of suggestion.

The further concern of this study is to investigate the role of teachers as the authority and major source of suggestion in the class, particularly as the main character who has emotional dominance over their students. This study, also, attempts to address the effects of specific positive and negative suggestions on students' performance during examinations.

1.5. Significance of the Study

Students sometimes feel difficult to manage and control their emotions in order to face various situations in their educational life. It is imperative to manage stress and emotions, which is crucial for better performance and to cope with the demands of the world properly. As a result, success in educational contexts can be predicted more by the emotional measures and emotional intelligence of students. But, the question is how parents, teachers, and other students may accelerate this process of emotional maturity by justifying them to believe in something that may not be true? In other words, how they may influence students emotionally, which would be conducive to better performance or diminishing their ability in a stressful situation by transferring negative emotions?

Inducing positive emotional states in people facilitates flexible, effective problem solving, decision making, and evaluation of events (Erez & Isen, 2002). It appears that suggestive forms of influence are ubiquitous in human interaction, and positive emotions have a potentially adaptive and interactive nature and might moderate the relationship between stress or depression and students' behaviours and attitudes that lead to success. Therefore, students inevitably get suggestion or emotional influences from parents, teachers, other students, and even themselves intentionally or unintentionally, which

ultimately affect them in their everyday encounters. Thus, it is not only the students themselves that is the matter in their academic breakthrough, but also their environment and people around them who may have a huge impact on their emotional state, which could lead them toward better self-efficacy, self-esteem, and appropriate motivation to fulfil their objectives and obligations. Suggestive forms of influence play a role at various levels, namely, perceptual, behavioural, cognitive, emotional, and motivational. Therefore, it is high time to focus more interest on this topic and to find ways of doing research on these processes and their influence on our life.

The significance of this study is that no research has been conducted on how emotional state could be stimulated or triggered by various sources of suggestion that ultimately manifests their influence on the students' performance. Identifying this major effect may have a great impact on the emotional and psychological orientation of educational settings by considering these constructs as a key factor in determining students' academic achievement. According to positive psychology, it is more important to focus on developing positive characteristics in students and feed them with positive emotions and perhaps constructive suggestions.

1.6. Statement of the problem

The current study will focus on the interaction effects of suggestion and emotional intelligence on reading comprehension by answering the following research questions.

1. Does suggestion have any significant effect on the emotions and emotional intelligence of Iranian students with intermediate proficiency?
2. Does suggestion (i.e., positive or negative) have any significant effect on students' performance on reading comprehension tests?
3. Which variable, suggestibility or emotional intelligence, significantly account for the variance in Iranian EFL learners' reading comprehension?
4. Is there any significant relationship between students' E.Q. (Emotional quotient) and their suggestibility score?
5. Is there any relationship between students' E.Q. and their reading comprehension?

To the above question the following hypotheses have been speculated:

1. The researcher's hypothesis is to reject the null hypothesis. There seems to be some empirical support that emotional arousal (Affect Intensity), which may be caused by suggestion, can have both positive and negative consequences on students' performance (Roussel, 2003; Levine et al., 2008).

2. The researcher's hypothesis is to reject the null hypothesis. As suggestibility may cause emotional arousal, which is conducive to positive or negative consequences, it is anticipated that suggestions may influence students' performance in reading comprehension tests. This fact has also been acknowledged by some studies conducted on the relationship between reading comprehension and suggestion (Knudson, 1968; Mutke, 1967; Holcomb, 1970; Wark, 1989).

3. The researcher's hypothesis is to accept EQ's predictive relationship with reading comprehension. It is hypothesized that there is a positive and significant relationship between reading comprehension and emotional intelligence of students studying at the intermediate level of proficiency (Gupta & Rajwinder Kaur, 2006; Jones, 2002; Gonzales, 2011). Although there have been some studies considering the effect of the perceived difficulty in reading comprehension and strategy use (Oxford et al., 2004), further studies are needed to decide the predictive relationship of suggestibility and their performance on reading comprehension tests.

4. The researcher's hypothesis is to accept the null hypothesis due to the lack of research, and additional information is needed to clarify the relationship between suggestibility score and EQ. Therefore, there is no relationship between students' EQ and their suggestibility level.

5. The researcher's hypothesis is to reject the null hypothesis. It is hypothesized that emotional intelligence will be correlated with the reading test. There have been some studies investigating these variable correlations (Jones, 2002; Gonzales, 2011).

1.7. Definition of terms

In order to promote a common conceptual understanding, the following list provides an operational definition for terms used throughout this research project. Other relevant terms are defined throughout the text of this study.

Emotional intelligence

Emotional intelligence is defined as "the capacity for recognizing our own feelings and those of others, for motivating ourselves and for managing emotions effectively in ourselves and others" (Hay Group, 2005, p. 2). It is an intelligence model that encompasses a person's capacity to perceive, understand, and manage emotions (Mayer & Salovey, 1997).

Emotional intelligence competencies

There are eighteen specific emotional intelligence capabilities linked to one of the four emotional intelligence clusters: emotional awareness, accurate self-assessment, self-confidence, emotional self-control, transparency, adaptability, achievement, initiative, optimism, empathy, organizational awareness, service orientation, developing others, inspirational leadership, change catalyst, influence, conflict management, and teamwork & collaboration (Hay Group, 2005).

Self-efficacy

It is defined as one's belief in his/her ability to acquire new information or complete a task or activity to a prescribed level of performance (Bandura, 1986).

Hypnotic suggestion

It is the influence of one person on another without his or her consent, the implanting of an idea, possessing a submissive tendency, and appealing to the unconscious (Marcuse, 1976)

Autosuggestion

"... An instrument that we possess at birth, and with which we play all our life unconsciously. It is, however, a dangerous instrument; it can wound or even kill you if you handle it imprudently and unconsciously. It can, on the contrary, save your life when you know how to employ it consciously" (Coué, 1992, p. 19).

Reading comprehension

Reading comprehension can be understood as the process through which the recognized words are transformed into a meaningful idea (Hoover & Gough, 1990). It is a complex process that requires the

activation of numerous cognitive skills (Kintsch, 1998). There are also different depths of understanding (Perfetti et al., 2005).

1.8. Limitations of the research

The main limitation of this experiment was its sample size (N = 30), which made it difficult to generalize the results to a wider population. In addition, subjects were be limited to Iranian intermediate students. Despite the frequent recognition given in the literature to the potential relationship between intelligence and strategy use, this study does not subsume these factors affecting the reading comprehension test. The importance of the interview should be recognized to complicate and validate the findings of this study, but due to the lack of time, this importance was neglected by the researcher.

2. Methodological Considerations

This study adopted an experimental with random group pretest-post-test two treatment design. This section presents the research design and methodology of this study, an overview of the population and sampling procedures, a description of the instrumentation, and the methods for data collection and analysis.

2.1. Participants

The initial sample consisted of 85 EFL learners (both male and female) who enrolled in a language centre in Tehran, Iran, in three intact classes studying Cutting edge coursebook. However, in order to have a homogeneous sample in terms of proficiency level, the general English proficiency test of the institute was administered. The results showed that 30 students were at an intermediate level of proficiency. After evaluating them as intermediate learners, these students were recruited as the final participants of the present study. Also, all these students were male, and there were a small number of females in the initial sample, but after the screening, they were excluded from the study sample as none fell at the intermediate level. They varied in age from 10 to 15. The subjects were randomly and evenly split between three sets of groups, two experimental groups, and one control group.

When talking about suggestibility, it is important to not overlook the part of the population that is the most susceptible to influence, children. Children have an ever-developing mind that is constantly being filled with new information from sources all around them. Thus,

researchers have identified key factors, both internal and external, that are strong markers for suggestibility in children. Consequently, we chose children and juveniles as the subjects of this study to determine the efficiency of negative or positive suggestions in their performance. However, it was expected that different children with different suggestibility levels would respond diversely to the corresponding suggestion.

Table 3.

Organization of Groups and Their Respective Treatment

Groups	Type of treatment	Number of participants
Experimental group 1	Positive suggestion	10
Experimental group 2	Negative suggestion	10
Control group	No suggestion	10

2.2. Measures

The researcher employed four sets of instruments in an attempt to obtain the relevant data. The first instrument was a general English proficiency test of the institute used as a homogenizing test, containing 100 multiple-choice items: 40 grammar (structure) items, 20 vocabulary items, and 40 reading comprehension items administered to 85 participants in the first phase of the study.

According to Begg et al. (1992), skilful repetition of a certain interpretation will tend to increase its subsequent familiarity, and since research shows that a statement will seem true if it expresses facts that seem familiar, the repetition of certain statements may have a definite suggestive impact. Therefore, we extracted a reading passage from the final chapter of the coursebook (Cutting edge, 2005, p. 148) they were studying that contained words and structures that they had not studied yet to apply the above principle. The reason to utilize the reading passage from the coursebook is its flexibility to be used with both negative and positive suggestions in groups. In other words, we could suggest the easiness of the reading test in the first group by emphasizing that it is chosen from their coursebook, and we may also

suggest the difficulty of the test by simply emphasizing that it is adopted from the final chapter and contains difficult words or structures. Also, they were not informed of the source of the selection prior to the test, and the suggestion process commenced before they took the examination. In addition, to assess students' knowledge of reading comprehension as a final assessment, the reading comprehension section of a TOEFL practice test, ETS (1995), was used. The test consisted of 55 items. The reliability of the test computed for the present study using Cronbach's Alpha was 0.88. The reliability of the test was calculated through the KR-21 method, too; the index obtained through this method was 0.82.

The third instrument employed in this study was the Bar-On emotional intelligence test, also called the emotional quotient inventory (EQ-I), which is the first measure of emotional intelligence designed by Bar-On in 1980. It is a self-report measure of emotionally and socially intelligent behaviour that has five composite scales: Intrapersonal, Interpersonal, Adaptability, Stress Management, and General Mood and provides an estimate of emotional-social intelligence (Bar-On, 1997). It includes 133 items in the form of short sentences that measure five broad areas of skills and 15 factorial components (already explained in Bar-On's Model). The questionnaire employs a five-point response scale with a textual response format ranging from 'very seldom' or 'not true of me' to 'very often' or 'true of me' and takes nearly 40 minutes to complete. Each item has a value ranging from five to one. In this study, each item was explained by the teacher to enhance the comprehension of the students and the reliability of the answers checked by them. The internal consistency of the overall EQ-i varies significantly based on the study, ranging from .76 to .97, and test-retest reliability studies indicated that there was consistency in the findings from one administration to the next. One month and four-month test-retest values range from .78 to .92 and .55 to .82. These findings support the argument that the EQ-i is a reliable instrument but suggests that it is sensitive to changes in emotional and social functioning (Bar-On, 1997).

Also, the EQ-i was validated through the use of self-assessments, observer ratings, and measures of acculturation, attributional style, coping with occupational stress, job performance, and work satisfaction. In general, the degree of correlation between EQ-i and self-assessment and observer ratings was high with an average of .57

and .52, respectively (Bar-On, 1997).

The final measure was the Barber Suggestibility Scale (BSS) (Barber, 1965) which includes a subjective scale and an objective scale that are responses to various kinds of suggestions. The objective scale is completed by the experimenter and has a score ranging from 0 to 8. The score on the subjective scale, which is completed by the participant, ranges from 0 to 24. Each scale has eight items. Test-retest reliability is over 0.80 for both scales. Split-half reliability is between 0.70 and 0.84 for objective scores and 0.84 to 0.88 for subjective ones. The BSS was employed due to the speed and easiness in which it may be completed, the inclusion of both an objective and a subjective measure (Weitzenhoffer & Hilgard, 1959). The result of this scale would help us demonstrate the correlation between suggestibility and other constructs involved in this study.

2.3. Data collection procedures

The researcher sought permission from the Institute's administrator, learners, and their parents to begin conducting the research and collecting data. Once approval was obtained, the sample was selected, tested, split, and the data collection phase began. Participants were asked to attend pre-arranged data collection sessions organized by the researcher. Each pre-arranged session was conducted by the teacher himself, who was informed by the researcher about the procedure. To avoid subjects becoming aware of the research plan, the assessment questionnaires were postponed to the end of the study and the main treatment. The classes were arranged in an organized order following each other for ease and speed of data collection.

Also, as the effect of suggestion may be determined by a kind of social influence that relies on the automatic activation of meaning structures and the exclusion of more critical-rational ways of thinking, the researcher attempted to use the teacher who was assumed to be the most respected, knowledgeable, and authoritative character in the institute with the optimum influence on students. By doing so, we may activate the common meaning structure of students which is the belief that *teachers are usually right* and make the process of suggestion easier and more effective to conduct. To the extent that a person possesses this kind of meaning structure and perceives a certain speaker to be an expert, he will also tend to believe what the speaker says. The teacher was also instructed about the specific suggestions prescribed for this

study, which were selected from Hammond's (1988) *Handbook of Hypnotic Suggestions* (e.g., suggestions for concentration and reading, p. 446).

During the course of their study, students were given the first reading test with the corresponding suggestion for each group by the teacher. So, the first experimental group received positive suggestions to enhance their performance, the second experimental group received negative suggestions on the upcoming test to see if their performance was affected, and no suggestion was applied to the control group (Appendix A). The process of examination took approximately 35 minutes for each group, then the papers were collected, and students continued to study their coursebook until the end of the session without receiving further treatment or suggestions. They continued their normal studying procedure for two sessions.

The final reading assessment was given again with the corresponding suggestions for each group (Appendix B). However, this time the teacher has used the last test as a reinforcement tool for efficient suggestion by emphasizing its result for two experimental groups. The papers were gathered from each group for further analysis, and they continued their studying of the coursebook. Also, it was announced by the teacher in the last examination session that there would be no more reading assessments to make sure that students would not study the final reading passages of the book and the time interval between these two tests contributed to the overall purpose of the study. To emphasize the importance of the examinations, students were told that their score on these tests would be a criterion for their final assessment to pass the course to involve them emotionally and to create a natural situation. In the following sessions, students were asked to complete the questionnaires (the Bar-On EQ-I and the Barber Suggestibility Scale) with their teacher helping them whenever needed. This process took approximately 70 minutes and the teacher, after instructing them on how to fill the questionnaires, asked them to complete them carefully. Then, papers were collected to be analyzed.

2.4. Data analyses

The study was designed to understand the effect of suggestion on emotional intelligence and to explore the interaction of these constructs on reading comprehension among different groups of participants. Data were analyzed to examine the statistical hypotheses

posed in the study. To investigate these hypotheses, the researcher examined the range of scores, mean scores, and standard deviations for different groups of participants. Additionally, one-way ANOVA and Pearson product-moment correlation was conducted to investigate significant differences and relationships among students.

To answer the first two questions, which were the impact of suggestion on emotional intelligence and reading ability of the participants, data were analyzed to obtain scores for two reading comprehension tests of each group. Then, the mean scores for each of the reading comprehension tests were calculated for each group. A comparison of means and correlation was employed to investigate the effect of suggestion on emotional intelligence and the three-way interaction between suggestion, emotional intelligence, and reading comprehension.

Pearson product-moment correlation was conducted to see if students' EQ and their suggestibility scores are correlated. One-way ANOVA was utilized to understand the existence of any significant differences between groups to prove the impact of suggestions on the participant's performance. Finally, in order to answer the third research question, that is, the extent to which suggestibility score and emotional intelligence predict students' reading comprehension, a test of multiple regression was run.

3. Data Assessment

In this section, a preliminary evaluation of the quantitative data is provided, as are the detailed quantitative results of the study. Quantitative results are organized in terms of hypotheses generated from the initial research questions.

3.1. Preliminary evaluation of the data

The main purpose of utilizing a general English proficiency test was to homogenize the participants and select learners with an intermediate level of proficiency. Table 4 demonstrates descriptive statistics of the proficiency test. Since the obtained distribution of scores did not significantly differ from the normal distribution, the researcher selected 35 % of the participants. Therefore, 30 students who scored between 42.09 and 65.05 were selected for the study.

Table 4.

Descriptive Statistics for the General English Proficiency Test

	N	Mean	Std. Deviation
Proficiency Test	85	45.73	11.50

The researcher then examined the range, mean scores, and standard deviations of the first and the second reading comprehension tests to address the first two research questions posed in the study.

3.2. Analysis of data

Six questions were determined for this study. The research questions were as follows:

- **Research Question #1:**

Does suggestion have any significant effect on the emotions and emotional intelligence of Iranian students with intermediate proficiency?

- **Research Question #2:**

Does suggestion (i.e. positive or negative) have any significant effect on students' performance on reading comprehension tests?

- **Research Question #3:**

Which variable, suggestibility or emotional intelligence, significantly account for the variance in Iranian EFL learners' reading comprehension?

- **Research Question #4:**

Is there any significant relationship between students' EQ (Emotional Quotient) and their suggestibility score?

- **Research Question #5:**

Is there any relationship between students' EQ and their reading comprehension?

Results for research question #1:

To investigate the effect of suggestion on the emotions and emotional intelligence of the students, the correlation between test-takers suggestibility scores and their preferences on Bar-On Emotional Quotient Inventory was calculated. Table 5 summarizes this analysis. It can be seen that the correlation coefficient index is -.581; here, a negative relationship between the two measures is proved to be significant (p = .001). That is, both suggestibility and Bar-On Emotional Quotient Inventory are significantly and negatively correlated. Therefore, it can be claimed that suggestion can have a relationship with emotions, but it may require more research and intensive interviews with the participants to determine its effect on emotions and answer this question.

Table 5.

Correlations between Suggestibility and E.Q.

		Suggestibility	EQ
Suggestibility	Pearson Correlation	1	-.581
	Sig. (1-tailed)		.001
	N	30	30
EQ	Pearson Correlation	-.581	1
	Sig. (1-tailed)	.001	
	N	30	30

Results for research question #2:

The results of the first reading assessment, presented in Table 6, indicated that the first experimental group has scored better than other students involved in this study. The mean score for the first group was 75, indicating the positive effects of positive suggestions on students' reading comprehension. On the contrary, experimental group #2, who received negative suggestions, failed to score high, which indicates the power of suggestion on students' performance and their overall achievement. Surprisingly, the control group who were neutral and received no suggestion during the study acquired middle rank in both

pre-test and post-test. Although the differences in the mean scores of the second assessment seem negligible, considering both tests may give us a better understanding of the whole picture and the effect of suggestion.

Table 6.

Descriptive Statistics for the Second Reading Assessment

	N	Mean	Std. Deviation
Experimental 1	10	70.40	5.18973
Experimental 2	10	67.90	4.28045
Control	10	69.80	4.89828

To further analyze the data, we performed a one-way ANOVA. Results of the one-way ANOVA are displayed in Table 7. The results show that there was a significant difference between the average reading comprehension test scores among students who received positive suggestions, those who received negative suggestions, and the neutral control group.

Table 7.

One-Way ANOVA (Control and Experimental Groups RCT Score)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	561.867	2	280.933	1.284	.031
Within Groups	3320.800	27	122.993		
Total	3882.667	29			

Results for research question #3:

In order to determine the extent to which EQ predicts participants' reading performance, a test of multiple regression analysis was run. The results revealed a significant effect ($p < .001$). In order to determine how strongly the predictor variable (E.Q.) influenced the criterion variable (reading performance), the Beta value was calculated. Table 8 reveals the results.

Table 8.

Regression Coefficients for Degree of Relationship (Suggestibility, Emotional Intelligence)

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
	B	**Beta**		
1 (Constant)	6.98		1.14	.296
EI	.691	.512	4.01	.001
Suggestibility	.325	.211	2.09	.011

Dependent Variable: Reading performance

According to the results presented in Table 8, emotional intelligence significantly predicted the reading performance of the students. In fact, for every unit of increase in the emotional intelligence level, the reading scores of the participants increased by .512, which is a relatively high index. Overall, the results of the present study indicate that emotional intelligence is a relatively strong predictor of reading performance, while suggestibility is not strongly associated with this ability. Also, the result displayed a negative correlation between emotional intelligence and suggestibility.

Results for research question #4:

The result of the analysis demonstrated a negative relationship between two constructs, emotional intelligence, and suggestibility, which may make us consider their relationship in depth for further understanding by interviewing participants. We may claim that those students who are emotionally intelligent are less suggestible, and those with low EQ scores may be more suggestible and good subjects for our study. Table 9 represents the correlational statistics of these variables.

Results for research question #5:

To investigate the relationship between reading comprehension scores and test-takers preferences on Bar-On Emotional Quotient Inventory, a correlation was calculated. As represented in Table 10, the correlation

coefficient index is .541; here, a direct linear relationship between the two measures is proved to be significant (p = .001). That is, both reading comprehension and Bar-On EQ are significantly correlated.

Table 9.

Correlations between Suggestibility and E.Q.

		Suggestibility	**EQ**
Suggestibility	Pearson Correlation	1	-.581
	Sig. (1-tailed)		.001
	N	30	30
EQ	Pearson Correlation	-.581	1
	Sig. (1-tailed)	.001	
	N	30	30

Table 10.

Correlations between Reading Comprehension Tests and E.Q.

		RC tests	**EQ**
RC tests	Pearson Correlation	1	.541
	Sig. (1-tailed)		.001
	N	30	30
EQ	Pearson Correlation	.541	1
	Sig. (1-tailed)	.001	
	N	30	30

Results indicated a strong association between reading comprehension tests and EQ, which had also been investigated in earlier studies. This may help us to consider the role of emotions in reading assessment and overall achievement.

4. Discussion of Implications

As stated earlier, the present study intended to investigate the impact of suggestion on emotional intelligence and its contribution to reading

comprehension among Iranian EFL learners. Results of the study substantiate arguments that suggestion is an important factor that may assist or direct students emotionally to reach ultimate achievement through self-knowledge. Also, the results of this study help to validate the importance of developing the whole person and add to the growing body of research to support student-focused education by building personal skills and understanding their psychological states and styles to increase academic achievement.

The results of the study further support efforts to enhance the understanding of teachers in conducting learning activities and create as many opportunities as possible for students to earn and hold better conceptions of their abilities and their educational advancement. Additionally, the study provides further support to the initiation of professional development and assessment plans for teachers to ensure student-centred, psychological-based instructional methodologies and new approaches to recognize the emotional states of students to be used in their classrooms.

This study, by considering two psychological variables (i.e., emotional intelligence and suggestibility), attempted to emphasize and illustrate the neglected role of these variables by teachers in Iranian institutes, which may cause a lack of self-confidence and self-esteem in more suggestible students. However, in most cases, teachers utilize unintentional suggestions that may influence students' performance and overall achievement, as was indicated and addressed by the first two questions in this study. The result of this study is consistent and in line with previous theoretical and empirical studies that have been conducted to investigate the role of suggestion, emotional intelligence, and reading comprehension of learners as had been mentioned numerously throughout this study. For instance, Knudson (1968), Mutke (1967), Holcomb (1970), and Wark (1989) empirically support the positive relationship between suggestion and reading comprehension as well as second language performance. In addition, studies by Gupta and Rajwinder Kaur (2006), Jones (2002), and Gonzales (2011) empirically demonstrated the positive relationship between E.Q. and reading ability. Therefore, one of the possible contributions of this study is that it provides further empirical support for the utility of suggestion as pedagogical instruments for enhancing EFL learners' academic performance.

The most crucial issue in EFL contexts, however, is how to

empower students emotionally. This is partly answered by Downey et al. (2008) who claimed that high emotional intelligence contributes to increasing motivation, planning, and decision making, which positively influence academic performance. So, we may go reverse the path to achieving high emotional intelligence by enhancing motivation and confidence through suggestion. Given the fact that suggestions were shown to have the potential to affect subjects' emotional intelligence, the higher scores on the reading comprehension test obtained by the subjects in the experimental group could be attributed to their higher level of emotional intelligence. Overall, this study was an attempt to confirm the impact of suggestions on emotions and their relationship with emotional intelligence, academic success in general, and reading comprehension achievement in particular.

The results of the study enabled us to argue for a number of pedagogical implications with respect to the relationship between suggestion, emotional intelligence, and L2 reading ability. First, it seems that suggestion and emotional intelligence can still serve as a deciding factor in planning classroom activities and message transformation or what I call message control to avoid any unintentional suggestion. As the results of the present study indicate, there are differences between the reading ability of the students with different suggestive interventions (negative and positive suggestions). This implies that teachers can utilize positive suggestions throughout their class, particularly before the upcoming assessments and avoid any intentional or unintentional negative suggestions along with their classroom activities to help them use their potential and improve their reading ability. An important pedagogical implication that follows from the findings of this study is that in order to have more efficient and effective language instruction, language centres need to encourage teachers to use instructional techniques that utilize and recognize the emotional and psychological state of the EFL learners for their benefit to improve and raise learners' emotional intelligence and ultimately their performance.

The experiment was found to be appealing to the students of the first experimental group who achieved the highest score. They were all enthusiastic about and interested in the positive suggestion that fostered higher levels of emotional intelligence. They told us that they had never thought about their emotions in a language class, and when we shared with them the findings of the study, they were excited to

learn that suggestions from the teacher may involve them emotionally and positively impact their performance before, during, and even after the test situation.

5. Concluding Remarks

Overall, this study yielded three important findings:

- Exposing learners to various suggestions has significant effects and relationships with EFL learners' emotions and performance.
- Exposing learners to positive suggestions helps EFL learners perform better on reading comprehension tests, and negative suggestions would yield diminished performance.
- Emotional intelligence and reading comprehension achievement are positively correlated.

A corollary of these findings may be the recognition that a multitude of potentially interacting situational, psychological, and emotional factors co-determine the processes of foreign/second language comprehension, production, and learning. This, in turn, supports the notion of assessment and learning processes as interactive and mental that involve teachers, learners, the environmental-situational context, and psychological recognition of the teacher from his/her students' view where, according to the results of the present study, the emotional status of the reader assumes particular importance.

Notwithstanding, two caveats are in order: first, although the implementation of the suggestion and emotional intelligence approach in a classroom may prove motivating and useful for students, teachers may encounter difficulties in defining different learners' preferences and acting toward that particular trend and completing the formal syllabus in due time. Thus, the dilemma is that the more teachers adhere to suggestive and emotional approach principles in the classroom, the more they get away from the specified objectives of the lesson and encounter different learners with various psychological and emotional preferences who have been assembled without any psychological recognition. Second, the implementation of such procedures that foster higher emotional intelligence in EFL learners requires trained teachers, and novice teachers may simply fail to achieve positive outcomes if they attempt to do so. Teacher training programs, therefore, are needed to help novice teachers implement the

suggestive and emotional approach in EFL contexts successfully.

6. Appendix A

6.1. Transcription of the first reading assessment suggestion

Experimental group 1

Teacher: "Welcome everybody."

"This session, we are going to have an easy exam for you, and that would be a reading examination, which will contain words and structures that we have already covered in class. Also, it will contain some new words that I am sure you will guess from the surrounding words and sentences. So, as you have done other tests before, you will find this one much easier and enjoyable. This test has been extracted from your coursebook that we have not covered yet. Therefore, it should be easy for you to complete the questions. But we are going to have some fun before taking the examination. We are going to try to understand a new method to increase our ability by only relaxing and concentrating our body and mind to control our emotions and use them to achieve relaxation. Let's begin, first of all, try to fix your eyes on the spot that is on the board and listen carefully."

The following processes were performed.

- Binaural Beats Spiritual Sleep Music was played in the background.
- Light trance was attempted through the counting method.
- The relaxing inductions were delivered.

The teacher suggested that "you are very motivated and curious about upcoming examination…. This examination is going to be far easier for you to handle because it is from your coursebook and is a challenge that you would pass easily without any trouble…. This contains words you have already covered and structures you have already studied. So there is nothing to worry about just relax and study the passage carefully and try to spot the answers by reading and understanding it, so that, it would become easier and take less time to answer the questions…. This would be a very pleasant experience for you all."

Acceptance of suggestions tested through nonverbal feedback.

After suggestions, the session ended through the counting method

along with motivating and relaxing inductions.

After 5 minutes break, they took the exam. It took 37 minutes for the last student. After the exam teacher tried to get positive feedback as was arranged.

Experimental Group 2

Teacher: "Welcome everybody."

"This session, we are going to have a reading exam, which has been extracted from the final chapters of the book that you have not studied yet. Therefore, it contains a lot of words that you haven't studied and structures that we haven't covered yet. But before taking the examination, we want to try a new method to test your performance. Let's begin, first of all, try to fix your eyes on the spot that is on the board and listen carefully."

The following processes were performed.

- Binaural Beats Spiritual Sleep Music was played in the background.
- Light trance was attempted through the counting method.
- The relaxing inductions were delivered.

The teacher suggested students that "…. This exam would be difficult for you, and it is natural, and I don't expect you to score high in this exam for it is far above your level and contains grammatical structures that are necessary to know to answer the questions and vocabulary, which make it difficult for you to answer the questions…. Overall, this test is much difficult and may be challenging for you; so, don't try hard and if you couldn't answer the questions, just leave them and pass the paper to me.

Acceptance of suggestions tested through nonverbal feedback.

After suggestions, the session ended through the counting method along with relaxing inductions.

After 5 minutes break, they took the examination, and it took 42 minutes. After the exam teacher tried to get negative feedback as was arranged. They continued the normal procedure of the class for the rest of the time.

7. Appendix B

7.1. Transcription of the second reading assessment suggestion

Experimental group 1

Teacher: "Welcome everybody."

"This session, we are going to have another easy reading exam for you, and it will contain words and structures that we have already covered in class. You will find this one much easier and more enjoyable because it is rather designed for your level and I expect that it will be even cooler than the last examination because its passage is also interesting. Therefore, it should be easy for you to complete the questions. Again, we are going to have some fun before taking the examination to increase our ability by only relaxing and concentrating on our body and mind to control our emotions and use them to achieve relaxation. Let's begin, first of all, try to fix your eyes on the spot that is on the board and listen carefully."

The following processes were performed.

- Binaural Beats Spiritual Sleep Music was played in the background.
- Light trance was attempted through the counting method.
- The relaxing inductions were delivered.

The teacher suggested that "you are very motivated and curious about upcoming examination…. This examination is going to be far easier than the last one for you because it is designed for your level. This test contains words you have already covered and structures you have already studied. So, there is nothing to worry about just relax and study the passage carefully and try to spot the answers by reading and understanding it. Thus, it would become easier and take less time to answer the questions…. Try to do your best. All right."

Acceptance of suggestions tested through nonverbal feedback.

After suggestions, the session ended through the counting method along with motivating and relaxing inductions.

After 5 minutes break, they took the exam. It took 35 minutes for the last student. After the exam teacher again tried to get positive feedback as was arranged.

Experimental Group 2

Teacher: "Welcome everybody."

"This session we are going to have another reading exam for you, which is the reading comprehension section of a TOEFL practice test. Therefore, it contains a lot of words that you haven't studied and structures that we haven't covered yet. But before taking the examination, we want to try the same method again. Try to fix your

eyes on the spot that is on the board and listen carefully."

The following processes were performed.

- Binaural Beats Spiritual Sleep Music was played in the background.
- Light trance was attempted through the counting method.
- The relaxing inductions were delivered.

The teacher suggested that "this exam would be difficult for you and it is natural because it is TOEFL, an international examination that most students fail to pass and I don't expect you to score high in this exam for it is far above your level. So, don't try hard and if you couldn't answer the questions, just leave them and pass the paper to me. I have given this test to the advanced class, and they found it very difficult. So I don't really expect you to do a great job and the scores seem to be apparent already. By the way, these exam scores are going to be accounted for as your final examination of this semester …. OK. Take it easy."

Acceptance of suggestions tested through nonverbal feedback.

After suggestions, the session ended through the counting method along with relaxing inductions.

Then, after 5 minutes break, they took the exam that lasted 49 minutes.

V. COORDINATING ATTITUDES OF THE STUDENTS WITH LEARNED HELPLESSNESS

Learned Helplessness, as one of the learners' factors that have a great influence on the process of learning, has been received great emphasis by some psychologists, researchers, and teachers in recent years. This study was an attempt to address this issue among Iranian EFL learners by identifying them through questionnaires and interviews. Subsequently, in order to neutralize its effect and recover learners from this state, the author hypothesized to administer successive tests, which were taken directly from the institute with predetermined difficulty to coordinate them with their perceived abilities. Therefore, the researcher adopted easy to difficult test procedures to alter learners' perceptions of their real capabilities to improve their performance. The result of the study confirmed the hypothesis by indicating progress in their final assessment that was coordinated with their real proficiency, although not strongly. In addition, it was found that a positive relationship exists between simplified tests and the Behaviours and Attitudes Scale of intermediate EFL learners by analyzing their correlations.

1. Helplessness Attitudes

Learned helplessness appears to make a huge distinction among learners in an educational setting with different psychological orientations when they fail to change their perceived attitude to

accomplish a task (Ghasemi, 2021b). Despite the increasing awareness of this psychological issue, our understanding of learned helplessness is limited. It has been recognized that the role of learned helplessness in educational settings has not attracted adequate attention; yet, students classified as such appear to reveal a common experience with failure. The extensiveness of educational failure seems to have direct effects on individuals' overall experience of success or failure in a variety of learning situations (Ghasemi, 2021c). Furthermore, learned helplessness is a phenomenon containing three components: contingency, cognition, and behaviour. Contingency addresses the uncontrollability of the situation. Cognition refers to the attributions that people make regarding their situation or surroundings of which they are part. Behaviour allows individuals to decide whether they will give up or proceed with the obstacle set before them (Peterson, Maier, & Seligman, 1993).

However, the attitude of the learners may be the main target of learned helplessness, which is directly influenced by helplessness and make obvious changes in their behaviour, feelings, learning, and thinking. Therefore, we should deal with the attitude and thinking of the learners to provide a remedy because these factors are used in the diagnosing processes by administering a questionnaire to assess their emotions and psychological status or health. We, also, deal with the same students in language institutes attempting to learn a language with various psychological orientations and learning styles and strategies; and, mostly, their failure in regular academic endeavours and language learning is attributed to their lack of interest or intelligence without particular diagnosis or resolution. This fact resulted in some studies on learned helplessness by measuring them and their effects (e.g., Firmin et al., 2004; Ghasemi, 2021b, 2021c). The effects of this psychological issue on students' behaviour, cognition, and educational processes have been considered, and its root has been tracked to factors like low self-efficacy (Bandura,1986) and negative expectation (Peterson & Vaidya, 2001); yet, few propositions about the possible resolution have been made namely, enhancing motivation. This study attempts to consider a novel procedure or direction to alleviate this disorder by providing simplified tests for learners who have developed negative attitudes or self-belief about their abilities in order to coordinate their cognition and emotions, which ultimately would improve their performance and behaviour. In addition, this study is an attempt to

coordinate the attitudes of the students by administering simplified tests to enhance their perceived self-efficacy by presenting an opportunity to reconstruct and modify their attitudinal, attributional, and thinking styles. Accordingly, the following research questions were posed:

[1] Is there any significant relationship between test simplification and students' attitudes?
[2] Does attitude modification make any significant difference in alleviating students' learned helplessness?
[3] Is there any significant relationship between test simplification and students' learned helplessness?

2. Research Methodology

2.1. Participants

To conduct this study, the researcher administered a learned helplessness measure to 78 EFL learners who had enrolled in a language centre in Tehran, Iran. The level of English proficiency of these students was intermediate, and they were all male and varied in age from 13 to 16. After considering the results of the questionnaires and opinions of the teachers about learners, only nine students were considered to suffer from learned helplessness. These nine students formed a group to receive simplified tests for intervention.

2.2. Instruments

The Perceived Influence Questionnaire was utilized as a learned helplessness measure that allows students to indicate their attribution for failure (Weisz, 1979). The questionnaire is a self-assessment test that consists of twenty items in which the subject may respond with one of two choices.

Considering the proficiency of the students, a standard pre-intermediate and intermediate test, which were used for students studying the Cutting Edge coursebook in the institute, was utilized as the simplified test and final test respectively. These tests consisted of 10 grammar items, ten vocabulary items, and a short reading task. Although the validity and the reliability of these tests are under question and not determined, the researcher used these tests because of the familiarity of the subjects with such tests and in order to

diminish test anxiety or any threats of uncommon tests that would affect the result of the study.

Student Behaviours and Attitudes Scale (SBAS) consists of 15 items that measure basic classroom behaviours and attitudes. It uses a seven-point scale that ranged from 1 (absolutely disagree) to 7 (absolutely agree). The scale was based on Iliana's Motivation for Learning Instrument published by Illiana (2000). Students were asked how much they agreed or disagreed with the statements about their attitudes toward classes and common behaviours. The scale consists of three variables named intrinsic motivation (6 items) with factor loading ranging from 0.43 to 0.74; self-discipline (4 items), with factor loadings ranging from 0.65 to 0.74; and respect for college professors (2 items) with factor loading ranging from 0.81 to 0.82. For this study, Cronbach's alpha coefficient for the scale was 0.83.

2.3. Data collection procedure

First of all, Perceived Influence Questionnaire was administered to detect and spot students with learned helplessness in order to assign them to a homogeneous group for intervention and administering the simplified tests. Then, the prepared simplified tests were given to the sample at a week interval. In the third week, a standard test according to their current proficiency level (intermediate level) was administered to assess their progress and performance in a real task that they are supposed to pass. Through the process of test-taking, the students were told that the tests are all for intermediate students, and they are supposed to pass them easily. Also, to motivate students and attract their attention to the tests, they were told that their scores would be considered in their final course examination. In the end, Student Behaviours and Attitudes Scale was administered to evaluate their attitude toward education and overall motivation to understand if there is any change or improvement in their attitudes and motivation, particularly, regarding their performance and score on the final proficiency test. A short interview, also, was conducted with students and their teachers to ensure and confirm the data collected and the final outcome.

2.4. Data analysis

This study adopted the one-group pretest-post-test design and was conducted for a duration of 3 weeks. The collected data were analyzed

to obtain scores for three standard proficiency tests and administered questionnaires. Also, in order to investigate significant differences and relationships between variables and the range of scores, the researcher interpreted and reported data through descriptive statistics and statistical analyses including means, standard deviations, and Pearson product-moment correlation. The Statistical Package for Social Sciences (SPSS, Version 22.0) was employed to analyze the data obtained for this study.

3. Major Findings

Considering the performance of students before the study, which had been reported close to the average in previous tests by their teacher, the researcher attempted to use this information as a criterion to compare the learners' performance in simplified tests. Therefore, descriptive statistics were used to indicate their performance on three simplified tests, as shown in the following table (Table 11).

Table 11.

Descriptive Statistics for Three Simplified Tests

	N	Mean	Std. Deviation
First Simplified Test	9	53.26	6.4201
Second Simplified Test	9	59.63	7.1305
Final Test	9	55.34	7.9470

Based on the table, it was found that students performed better in the second test, which may be associated with their familiarity with the second test and induced easiness. The interview was conducted afterwards, indicating that for some students the test was not so important at first, and they did not even trouble thinking about the questions they did not know the answer to, without any attempt to guess them. But, in the second test, it seems that some students had been encouraged to study and find the answers by asking some questions from their teacher during the interval period, which somehow proves that their interest and motivation had been provoked.

According to their teacher, they showed more interest and gossiped about the easiness of the test and promised to do better in the

upcoming test. All of these could play a role besides our manipulated variable in achieving the desired result, and evidently, the interval was the main factor in creating these variances in the students' decisions. But, the role of simplified tests should not be neglected at all because it was simply these tests that were the true originator of all these changes, debates, interests, and motivations by inserting a spark of meaning and goal into their performance by removing doubts about their abilities and ultimately modifying their attitudes toward learning and testing. Besides, I am sure if the final test was administered once more, we would witness even higher scores and better performance.

Considering the final test, which was compatible with their true level of English proficiency, we may conclude that their performance had been improved compared to their previous scores, which were reported to be close to and even below the average by their teacher. However, this point needs to be verified by more pre-tests and proficiency tests at the beginning of the study.

According to the Student Behaviours and Attitudes Scale, which was utilized to ensure improvements at the end of the tests and to investigate its possible relationship with test modification and learned helplessness, the attitude of the learners seems to be significantly improved. Moreover, the results of this scale were verified by the interviews conducted to confirm the improvement. To investigate the first question, besides the facts mentioned above, the researcher examined the correlation between the Attitude scale and the final test. As indicated in the following table (Table 12), the correlation coefficient between the two measures proved the presence of a significant relationship between the two measures ($p = .00$). Therefore, it can be concluded that there is a statistically positive relationship (although not strong) between simplified tests and the Behaviours and Attitudes Scale of intermediate EFL learners.

The second question asked an influential question by considering the possible role of attitude modification in learned helplessness. As mentioned above, the descriptive statistics of the learners' performance indicated possible improvements, and because of its positive relationship with the attitude scale, we may safely infer and conclude that attitude modification in the test situations could improve the learned helplessness of students, at least, in the educational setting. For the lack of empirical evidence, the generalizability and credibility of this claim may not be strongly approved. It needs administration of

the learned helplessness scale in the end with an intensive attitude modification treatment, which was ignored by the researcher due to the lack of time and resources available.

Table 12.

Correlations between the Final Test and Behaviours and Attitudes Scale

		Simplified tests	Behaviours and Attitudes Scale
Simplified tests	Pearson Correlation	1	.341
	Sig. (1-tailed)		.001
	N	9	9
Behaviours and Attitudes Scale	Pearson Correlation	.341	1
	Sig. (1-tailed)	.001	
	N	9	9

In addition, to answer the third question, we needed to use our inferences and speculate by using available data. According to the interviews conducted, although the researcher is not a specialist to determine the result, it seems that the learners, after taking the tests were motivated more and attempted to be more active than before. They looked to be empowered and lost their previous hopeless identity and were reported to be more motivated than before by their teacher. The reason for such active participation may be due to other uncontrolled and unnoticed variables besides the concerned ones, but I believe this study is valid in demonstrating part of the truth; although it had been merged with hypotheses and unsubstantiated claims.

4. Conclusion

As stated earlier, the present study intended to investigate the role of simplified tests in coordinating attitudes of the students with learned helplessness to see whether their perceived helplessness may be changed by modifying their attitude and perception of their ability and

performance on tests. The results revealed that the performance of the sample was improved gradually, and their attitude appeared to be revised and rearranged for their benefit. In addition, the correlation between the Behaviours and Attitudes Scale and tests was positive, which indicates the vital role of attitude in Iranian EFL learners' performance. This is consistent with previous experimental studies (Firmin et al., 2004; Andrew, 1998) that empirically support the negative role of learned helplessness and predetermined self-beliefs in test-taking situations. The most crucial issue in EFL contexts, however, is to find a way to improve attitudes and perceptions of the learners by various means and strategies.

5. Research Limitations

Similar to any research, the present study had some unavoidable limitations. For instance, the sample size ($N = 9$) was too small to yield a significant result. Even if the sample size was adequate, I had raised an issue earlier in this paper with the post administration of learned helplessness questionnaire to determine and measure the subjects' status after the tests. Also, the result of this study may not be generalizable because of lacking the requirements to complement the study.

VI. TEACHER COGNITION: TRACING COGNITIVE DISSONANCE

The constant interaction of teachers' beliefs, experiences, and perceptions exerts a prolonged influence on their teaching quality and requires congruency to yield efficient practices. However, several factors may discord this relationship, which would be conducive to cognitive dissonance, associated with negative feelings, frustration, and diminished efficiency. Contextual factors, as well as teachers' various specifications, could play significant roles in determining the extent of teachers' ability in implementing instruction in different contexts. The purpose of this study was to consider such significant factors and their impact on teachers' teaching practices by examining their cognitions and the probable dissonance they may experience through their professional development. Therefore, contextual factors (contexts with prescribed methodology and curriculum), teachers' licensure, teachers' experience, and their core and peripheral beliefs were explored to understand their cognitions and to explain the dissonance between teachers' beliefs and practices and its reflection on their teaching.

To this end, a concurrent triangulation mixed methods design was employed to collect data from 7 in-service teachers in an institute with a prescribed methodology. The teacher-participants were two groups of standard and alternatively licensed novice and expert teachers. After administering the DARQ questionnaire, the teachers were observed to identify any tension they may demonstrate during teaching. Then, they

were interviewed to assess their dissonant cognitions and the depth of their influence on their beliefs and instructional practices. Analysis of the data revealed that different teachers with various professional profiles might experience and respond to dissonance differently. Specifically, standard licensed, experienced teachers demonstrated their ability in coordinating their actions toward their beliefs through refining their peripheral beliefs and practices, which implied dissonance reduction through experience in contexts with prescribed methodology. In addition, the roles of licensure, experience, and contextual factors in dissonance have been further discussed across teacher groups, and the implications for teacher education are presented.

1. Teacher Cognition

For three decades, significant contributions to uncovering the effects of teachers' cognitions on teaching practices have been widely made, which represents an attempt to holistically and systematically look at intellectual changes while learning to teach (Borg, 2003, 2006, 2009). For instance, it has been already acknowledged that novice teachers come to the teaching situation with ideas, perceptions, thoughts, and beliefs, previously constructed by learning experiences, pre-service training, and contextual factors that influence their behaviours, decision making, and classroom practices (Burns, 1996; Ghasemi, 2021a; Hung, 2011; Johnson, 1994; Nishino, 2012; Pajares, 1992; Phipps & Borg, 2007; Woods, 1996). Furthermore, the connection and the effect of teachers' thought processes (e.g., planning, interactive thoughts, and theories) and their actions (e.g., students' classroom behaviour, student achievement) have been researched and understood (Armour-Thomas, 1989). Accordingly, the effect of teachers' beliefs and perceptions on their teaching and practices have been extensively investigated and studied from different perspectives under a bigger umbrella term "teacher cognition" (Borg, 2003, p. 81). To consider some related works, Phipps and Borg (2007) concluded that the cognition developed by novice teachers might be resistant to change and exert a persistent long-term influence on teachers' instructional practices, which is in line with Pajares' assertion (1992), that "beliefs are formed early and tend to self-perpetuate" (p. 324).

In addition, the influence of previous experience on teachers' behaviour (Richardson, 1996), teachers' beliefs about teaching on their

pedagogical decisions (Johnson, 1994), and practice on beliefs (Richardson, 1996) have been studied, resulting in a direct connection between their cognition and action that is conducive to likewise performance. This connection implies the necessity of congruency between beliefs, experiences, and actions, which are in constant interaction with each other (Freeman & Richards, 1996). However, if this connection is distorted by any means, it may give rise to frustration and negative feelings in teacher education courses (Galman, 2009), and even tensions in classroom practices (Borg, 2009; Crawley & Salyer, 1995). Cognitive dissonance is the consequence of such mismatches, tensions, and conflicts between opposing thoughts, beliefs, and actions (Festinger, 1957).

Also, contextual factors, such as a prescribed curriculum, time constraints, and high-stakes examinations, could be a potential factor in leading to incongruence between teachers' beliefs and practices, which could hinder language teachers' ability to adopt practices that reflect their beliefs (e.g., Fang, 1996; Ghasemi, 2021a); and according to Borg (2009), these factors mediate the extent to which teachers can act in accordance with their beliefs. In other words, when we restrict teachers' practice, we restrict their cognition, reflection, and efficiency. Therefore, teaching and learning to teach or object of study itself and issues inherent in the structures of departments and institutions also contribute to dissonance (Fanghanel, 2004).

While contexts with prescribed methodology seem to be a susceptible setting for cognitive dissonance to occur, no study has either addressed or investigated this common phenomenon in institutions where the methodology is prescribed for different teachers with various characteristics. Despite some of the beneficial effects of the methods on language teaching and teachers, which Rodgers and Emeritus (2001) considered a powerful concept, there are also numerous attacks on this concept, and it has been under criticism for a long time for ignoring the complex realities of teaching (Baily, 1980; Davis, 1999; Feyerabend, 1988; Stern, 1983). In these contexts, teachers are like robots who simply implement curricula designed by others, in an unthinking manner, and ignore their decisions and cognitions during teaching, which created a new focus (teachers' cognition and mental lives) for educational researchers that viewed teachers "not as mechanical implementers of external prescriptions, but as active, thinking decision-makers" (Borg, 2009, p. 2). When

students enter teacher education programs, they already have definite ideas about teaching and learning (Zeichner & Liston, 1987) and methodological prescription put these pre-formed conceptions at risk of rejection. A number of reasons have been advanced for the formation of this inconsistency between beliefs and practice. For instance, a lack of knowledge and skills to implement ideal teaching models or teaching methods could be the first reason (Thompson, 1992).

Furthermore, the teaching contexts can also impose constraints on teachers' beliefs or provide instruction that may not align with their personal theories (Duffy, 1982; Duffy & Anderson, 1986). This study, in particular, examines the determining and contributing role of context (prescriptive) in causing cognitive dissonance, which could be a better, academic explanation for the practice of the teachers in the class. In other words, this study is an attempt to address teachers' beliefs as situated in order to understand the relationship between teachers' beliefs and practices in a specific context. It is, therefore, imperative to attend to the contexts in which teachers work, since particular contexts play a dialectical role in teachers' beliefs (Elbaz, 1997). This means that teachers' beliefs form part of the context in which they work, and the context, in turn, shapes teachers' beliefs.

1.1. Statement of the problem

In some situations, the previously constructed beliefs are overshadowed by certain compelling policies and institutional rules that prescribe particular beliefs, approaches, methodology, curriculum, techniques, and learning and teaching processes that may be in direct contrast and inconsistent with teachers' developed networks of beliefs about programs, materials, and assumptions of teaching and learning. The role of dissonance as a catalytic in pre-service teacher identity development (Galman, 2009), as a concept to understand the strengths of negotiated and dynamic ability constructions (Ball, 1999, as cited in Hamilton, 2010), as a tool in narrative inquiry for teachers' development (Golombek & Johnson, 2004), as an instructional activity to create an awareness of dissonance in reducing resistance to diversity (McFalls & Roberts, 2001), and as a beneficial and dynamic process allowing shifts in structures/organization of learning in teachers (Hamilton, 2010) are significant contributions to understand the nature of cognitive dissonance.

Besides, contextual factors play an important role in determining the extent of teachers' ability in implementing instruction congruent with their cognitions (Beach 1994; Tabachnick & Zeichner, 1986), which confirms the significant role of context in teaching ability. But, considering contexts with prescribed methodology or curriculum, teachers' licensure, teachers' experience, and their core and peripheral beliefs, there seems to be a significant correlation and interaction among these issues, which has not been addressed in contemporary research. The way these variables could influence and reflect themselves in the form of cognitive dissonance in teachers' practice, how it could be addressed and understood by teachers in a specified context, and the manner it could be connected to teachers' beliefs, attitudes, dispositions, knowledge, and skills and behaviours in the classroom context are the major concerns, which may help us in understanding cognitive circumstances, dissonance, and consonance associated with these factors.

Therefore, this study attempts to understand different teachers' cognition and thinking processes in contexts that enhance the probability of the belief/practice conflict by examining their feelings, ideas, and performance. Despite the plethora of studies on the beliefs and practice correspondence in the literature (Artiles, Mostert, & Tankersley, 1994; Borg, 2003, 2006; Edwards & Newton, 1995; Hollingsworth, 1989; Pajares, 1992; Yin, 2006), we cannot find a study that meticulously examines this problem by associating it with the cognitive dissonance that seems to be a scientific explanation for such conflicts that teachers encounter in their professional career. Besides, relatively little empirical research has been conducted on in-service teachers, since the participants in most of the studies examining the relationship between teachers' prior learning experiences and their beliefs and practices have been almost exclusively with pre-service teachers (Peacock, 2001).

Particularly, there appears to be little documentation as to how such relationships between beliefs and practices may differ across teacher groups with various characteristics in English as a foreign language context. This study investigates, specifically, such relationships with in-service teachers considering their experience, licensure, and contextual factors. Also, as many of the institutions in the world have their own particular theoretical and methodological foundations, which they prescribe to be followed by different teachers, it seems timely and

important to launch a study to investigate teachers' cognitions in such a susceptible context to understand the impact of such prescriptions in relation with cognitive dissonance.

1.2. Purpose of the study

The purpose of this study was to gain a deeper understanding of EFL teachers' cognition in contexts with a defined methodology, which may lead to the discord between the behaviour and beliefs of teachers and influence their teaching efficiency. In other words, this study was an attempt to understand novice and expert teachers' sensitivity to inconsistencies, the way they recognize and deal with dissonance, and how they differ in resolving and reducing it in their professional careers. Accordingly, in this study, we considered the role of educational and contextual factors in promoting and shaping cognitive dissonance by evaluating teachers' cognitive processes and the various means they employ to make congruence connections. This study, also, considered the bi-directionally interaction of cognition and experience (Richardson, 1996) to see whether the practice can lead to change in beliefs, particularly in expert teachers. More specifically, this study looked at how teachers strive to reduce dissonance by adding "consonant" cognitions or by changing one or both cognitions to make them "fit together better" so that they become more consonant with each other.

1.3. Significance of the Study

Despite the growth the field has experienced in recent decades, teacher cognition has remained under-explored, especially for specific psychological and contextual areas such as the characteristics of the teachers in the foreign language teaching contexts. Given the importance of English language teaching in contexts with prescriptive methodology and the huge number of students and teachers involved in these institutions, the limited research into teacher cognition into such issues is noteworthy. The need to explore Iranians' EFL teachers' cognitions about predefined English instruction is particularly urgent, considering many institutes and language departments that ignore their teachers' pre-formed cognitions to promote their efficiency or diagnose and identify their cognitive problems.

This study was, therefore, conceived with the broad aim of exploring the complex cognitive systems that Iranian EFL teachers

draw on in their pre-specified instruction. These contexts offer both challenges and opportunities for English language teachers that should be explored to see whether they adapt and coordinate their attitudes or reject and experience hard times corresponding their beliefs and cognition with their practice.

Also, this study contributes to our understanding of teacher cognition when assigned processes are developing or revising previous cognitions and the way this happens in various teachers with different expertise levels. By exploring teachers' cognitive processes during their service in prescribed contexts, we may shed light on their adaptability power in reducing inconsistencies and the way cognitive dissonance demonstrates itself in their practice. This study represents one beginning attempt to holistically and systematically look at inconsistencies held between cognitions or between cognition and behaviour in a susceptible context.

Furthermore, the impact of pedagogical knowledge is also considered in understanding cognitive dissonance, which is measured through interviews and licensure. Also, this paper informs us about the dissonance level, awareness, and rejection or adoption in novice and expert teachers, which, as mentioned before, may play a destructive or beneficial role in identity and teacher development in such a specified context.

Consequently, this study is hoped to offer a better understanding of the way EFL teachers approach and respond to prescriptive instruction, which may provide valuable contributions to researchers, teacher educators, and policymakers to conceptualize the nature of English language teaching in these particular contexts by considering different teachers' cognitive processes and providing supportive training and education to enhance their efficiency.

1.4. Definition of key terms

Cognitive dissonance:

"Cognitive dissonance is a state of tension that occurs when an individual simultaneously holds two cognitions (ideas, attitudes, beliefs, opinions) that are psychologically inconsistent" (Aronson, 1972, p. 92); in teacher training contexts, the conflict between pre-service teachers' biographical identities and individual habitus (the values, orientations, subjective dispositions and behavioural traits) and their experiences is conducive to dissonance (Raffo & Hall, 2006). This

study is limited to the dissonance between teachers' pre-formed beliefs and demanded practices in prescribed contexts, which is considered and measured through dissonance arousal and reduction perspective introduced by Harmon-Jones and Harmon-Jones (2007).

Prescribed methodology:

"A fixed set of classroom practices that serve as a prescription and therefore, do not allow variation" (Bell, 2003, p. 326).

Teachers' beliefs:

"The information, attitudes, values, expectations, theories, and assumptions about teaching and learning that teachers build up over time and bring with them to the classroom" (Richards, 1998, p. 66).

Teacher cognition:

"The unobservable cognitive dimension of teaching, what language teachers think, know, believe, and do" (Borg, 2003, p. 81).

Teachers' professional profiles:

"A set of characteristics and features of teachers' professional lives, including teaching experience, learning experience, training for teaching, self-perceived ability and familiarity with teaching methodologies" (Zan, 2013, p. 20).

1.5. Research questions

The research questions for this paper focus on teachers' cognitions, perceptions, and implementation of their core and dominant beliefs in the classroom. More specifically, the following research questions will be addressed in this paper.

[1] To what extent do teachers with different levels of expertise (i.e. novice and expert) experience cognitive dissonance in contexts with the prescribed methodology?
[2] How do they recognize and address their dissonance to make it congruent or consonant with their previous beliefs, and thoughts?
[3] How does dissonance affect their practice and demonstrate any obvious signal in their teaching performance?

1.6. Limitations and delimitations of the study

Similar to any research, the present study had some unavoidable limitations. The first limitation was related to the generalizability of the findings since there were only seven participants as a representative sample without adequate observation and interview sessions to verify and generalize interpretations of the findings. However, including different research sites and participants with various professional profiles may have increased the level of representation of the study and accordingly, the generalizability of findings.

Secondly, as coordinator, conductor, and analyzer of the questionnaires, interviews, observations, and field notes, the researcher had complicated tasks and roles, which may have influenced the process of data collection and analysis. This limitation could have been avoided if an experienced research assistant had performed the analysis in conjunction with the researcher. Finally, considering time constraints to include both a larger sample of subjects and to employ more interviews and observation to collect data, it is still believed that the seven subjects and interviews provided sufficient data for the inquiry pointed out in the present discussion.

The primary delimitation of the study was the focus on contexts with a prescribed methodology that ignored other contexts. Also, by examining only male teachers' cognition, this study was delimited by gender.

2. Methodological Considerations

This section presents the research methodology and procedures of the study, including research design, participants and demographics, data collection methods, data analysis, and procedure of the study. The description of the three research instruments: questionnaire, observation, and semi-structured interviews are also provided.

2.1. Research design

Because of the complex nature of the phenomenon of teacher cognition and cognitive dissonance, it would have been virtually impossible to record people's experiences, perceptions, feelings, and thinking processes by utilizing quantitative or qualitative designs solely.

Therefore, the research adopts a mixed-method research design due to "triangulation" (Greene, Caracelli, & Graham, 1989, p. 259) and "enhancement or building upon quantitative and qualitative findings" (Bryman, 2006, p. 106) in order to investigate EFL teachers' cognition in contexts with prescribed methodology and the role of cognitive dissonance in their practice. Also, by utilizing a qualitative priority, more emphasis was given to the qualitative data rather than the quantitative data in order to explore the depth of teachers' cognition, and practices.

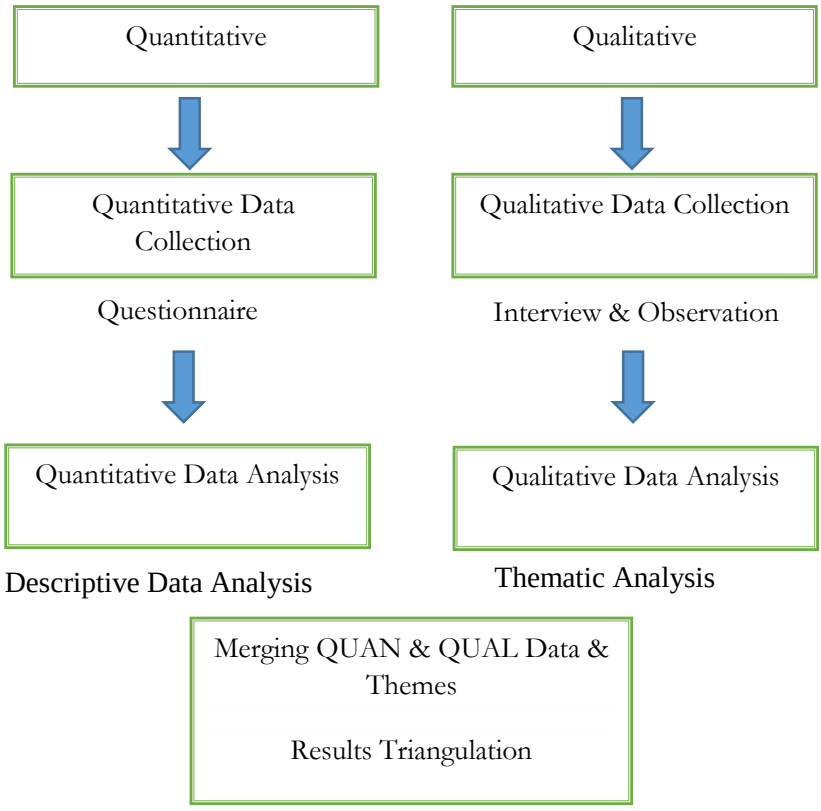
Regarding the limited time to collect data, this study employed a concurrent triangulation design, which is the most common approach to mixing methods (Creswell, Plano Clark, Gutmann, & Hanson, 2003) and aims to uncover EFL teachers' beliefs and their instructional practices consistency in prescriptive contexts. The purpose of using this design is to directly compare and contrast quantitative statistical results with qualitative findings (Creswell et al., 2003), and to combine the different strengths and weaknesses of quantitative methods (e.g., generalization) with those of qualitative methods (e.g., in-depth exploration; Patton, 1990).

Specifically, this design involves concurrent, but separate, collection and analysis of quantitative and qualitative data by integration in order to achieve the best interpretation of the research problem (Creswell et al., 2003). Therefore, to obtain a deeper understanding of the topic, the researcher attempted to utilize both quantitative and qualitative methods in order to achieve the triangulation of data, which increases the reliability of the findings (Allwright & Bailey, 1991). Figure 7 demonstrates a visual model of the research design employed in this study.

The quantitative part of this research comprised a survey design by collecting data through a questionnaire and to complement our database, the qualitative part of this research employed the methods of observation and interview by investigating participants' behaviour and beliefs. Using these two methods together, the researcher could validate or expand quantitative results with qualitative data and compare different data, namely, how different teachers with cognitive dissonance deal with the dissonance practices in their classroom.

Figure 7.

Schematic Representation of the Research Design



2.2. Participants and demographic

To conduct this study, seven in-service male EFL English teachers were selected to form two groups of novice and expert teachers. The criteria for selecting them were based on years of experience and pedagogical/academic knowledge. The first group was two novices and two expert teachers with academic education in TEFL or "standard licensed" (SL), and the second group included two novices and an expert teacher with limited pedagogical knowledge who lacks academic education in TEFL or "alternatively licensed" (AL). The rationale behind these criteria is their connection with cognitive dissonance and the purpose of the study that explores the role of prior

experience or beliefs and methodological knowledge in creating and causing cognitive dissonance or inconsistency demonstrated in teachers' practices. In other words, I utilized purposive sampling by selecting the sample based on personal judgment and the purpose of the study (Schwandt, 1997).

In fact, our beliefs formed according to our experiences through education and teaching along with our understanding and preferences of methodological issues, play a significant role in initiating consistency or inconsistency processes and influence both our cognition and action simultaneously (Holt Reynolds, 1992). According to the literature (e.g., Westerman, 1991) and the purpose of the study, each of the expert teachers had almost four years of teaching experience and less than a year for novices. Hence, the first group (SL) comprised two expert teachers with 4 and 5 years of teaching experience and a B.A. and M.A. degree respectively, and two novice B.A. degree teachers with 1 and 2 years of experience, all undergraduate TEFL students.

The second group (AL) comprised one expert teacher with four years of experience and a B.A. degree in English literature and two undergraduate novice teachers with almost one year of experience studying English literature. These teachers were selected from two institutes in Iran with a prescribed methodology that imposes a certain approach and practice on teachers. Finally, none of the teacher-participants was informed about the topic and purpose of the study until the end of the data collection phases, in order to minimize the probability of providing false information or exaggeration by them. They were assured that the final purpose and result of the study would be shared by the researcher in the end to obtain their cooperation. The demographics of teacher participants are presented in Table 13.

2.3. Context of the study

The context of this study, as mentioned before, was two institutes with prescribed methodology in Iran. Although they prescribe the particular curriculum, techniques, teachers' roles, and certain procedures to be followed during general educational preservice courses, the particular method and the values of the institutes are not revealed formally in order to distinguish themselves in the field and country. However, it seems that they took an eclectic approach or similar methodology without specifying its name like situational or ALM methodology. For instance, institute A adopts a structural approach toward teaching

grammar by emphasizing situational-based teaching and listening and speaking skills, which are closer to the situational language teaching method. Institute B, by taking the eclectic approach, attempts to distinguish its method from the ALM, which appears to be the way teachers teach at the beginning level, but, in the advanced levels, some tasks are prescribed by the curriculum to complement their devised methodology. However, these institutes share prescriptions in their methodology, which shapes most of the preservice educational programs. A brief preservice teacher training program is offered, providing a general picture of the institutes' values and methodology to assess teachers' capability in conforming to these practices and appears to be insufficient to engage and reform their prior beliefs and experiences.

Table 13.

Teacher Participants' Demographics

		Participants		Degree Obtained	Gender
		N	Name		
Group 1 (Standard Licensed)	Expert Teacher	2	Teacher 1	Bachelor (TEFL)	Male
			Teacher 2	Master (TEFL)	
	Novice Teacher	2	Teacher 3	Bachelor (TEFL)	Male
			Teacher 4	Bachelor (TEFL)	
Group 2 (Alternatively Licensed)	Expert Teacher	1	Teacher 5	Bachelor (English Literature)	Male
	Novice Teacher	2	Teacher 6	Bachelor (English Literature)	Male
			Teacher 7		

2.4. Data collection methods

Questionnaire

In order to design a questionnaire that focused on assessing individual differences in cognitive dissonance, Harmon-Jones, Amodio, and Harmon-Jones (2009) considered two main components of dissonance: dissonance arousal and dissonance reduction, in their Action-Based model of dissonance. The items in this questionnaire capture dissonance arousal/affect, tap dissonance/discrepancy reduction, and measure reactions in three of the most commonly used dissonance paradigms, namely, induced compliance, free choice/difficult decision, and effort justification. They referred to the measure as the Dissonance Arousal and Reduction Questionnaire (DARQ; Harmon-Jones, Harmon-Jones, & Newman, 2008). This inventory contains 28 items and captured data using a 5-point Likert-type scale (from 1= never to 5=always). Cronbach alpha was employed to determine the reliability of the questionnaire by Safarinia and Zandi (2010) in Iran, coming up with .825 reliability statistics. The reliability statistics for the sample of this study were calculated to be .85, which is presented in the following chapter. Factor analysis of the items with an extensive sample was conducted by Harmon-Jones et al. (2009), in order to identify six lower-order factors (dissonance situation vs arousal/reduction) plus two higher-order factors (arousal vs reduction).

In order to understand and identify the dissonance cognition of teachers, detect the arousal and reduction state among teachers, and answer the first question, this questionnaire was utilized. Also, we could measure the relative occurrence of this phenomenon in the institutions with prescribed methodology as a susceptible context by imposing certain beliefs and practices, which may result in dissonance.

Observation

Since dissonance is a phenomenon occurring in class during the process of teaching, the best way to explore it is by direct observation, which can be complemented, verified, and collated with the interview data. As the basis for stimulated recall during interviews, observation, and field notes helped the researcher to have a clearer and more accurate view of teachers' practices during the interview. Since this research was concerned with what naturally happened within a classroom setting, the researcher, as the observer, did not participate in classroom activities and assumed the role of a pure observer. Considering the reliability of the observation, the researcher attempted

to verify his interpretations of the classroom observation in the interviews with teachers afterwards. According to Ary, Jacobs, Sorenson, and Razavieh (2010), in order to enhance the validity of the observation, the researcher should carefully define the behaviour to be observed and must be aware of two sources of bias that affect validity: observer bias, which occurs when the observer's own perceptions, beliefs, and biases affect his/her interpretation, and observer effect, which occurs when participants behave differently just because they are being observed. Therefore, the researcher attempted to concentrate on predefined aspects of the observation, such as:

- The ability of the teacher to implement the predefined techniques and activities of the class as well as the method itself.
- The flexibility and creativity of the teachers in employing new activities that were not prescribed by the respective methodology.
- The confidence of the teacher in applying the defined methodology and transforming the materials properly.
- The experience of particular tension or pressure during teaching practice.

Consequently, with the selected teacher from each subgroup, there was one observation session to examine the correspondence between cognition and action. By taking field notes, the researcher attempted to supplement interview questions and provide stimulated recall during the interview.

Interview

In this research, the semi-structured form of the interview, which guarantees the coverage of the main questions and has a certain amount of built-in flexibility (McDonough & McDonough, 1997), was utilized. Also, the researcher attempted to build trust and rapport with the interviewees through appropriate probing techniques in order to obtain the most accurate responses possible (Fowler, 2009). The teacher interviews were conducted as the last phase of the study, in order to accommodate the responses to the observation. In other words, the responses obtained in interviews were compared with the data of what actually happened in class, which was collected through observations. Thus, a number of core questions (Appendix A) were

developed to cover all major issues and to encourage teacher-participant reflection on their practice and beliefs in order to understand their possible dissonance state and resolutions they take. Furthermore, the interviews were conducted in order to understand and assess the teachers' general pedagogical knowledge, methodological awareness and preferences, learning and teaching experiences, perceived teaching efficacy, satisfaction with the current approach, expectations, the issues on emotional and cognitive perspectives regarding their perceived attitude, and some questions on the factors causing dissonance were designed and posed to explore whether the participants have developed cognitive dissonance toward the prescribed methodology or not. In order to investigate deeper into the topic, the researcher asked for more detailed responses from the interviewees on the point of interest to reconstruct details of their experiences and perspectives. The teachers were assured that there would be no judgments or assessments about their professional career and teaching resulting from the interviews. The interviews with teachers were conducted a week after the observation and were audio-recorded for later analysis. It was anticipated that the teacher participants' responses would provide an explanation for their thinking processes in dissonance situations by declaring their espoused beliefs, feelings, and practices, which elaborate on the second research question.

2.5. Data analysis and procedure

Regarding the research design (concurrent triangulation design), the study had a concurrent form of analysis with a separate initial data analysis for each of the qualitative and the quantitative data, which was conducive to the merged interpretation of datasets (Creswell & Plano Clark, 2007, p. 136). First of all, the questionnaire was administered to understand the state of dissonance among teachers in prescribed contexts to differentiate them according to their particular educational and experiential characteristics. The results from the questionnaire were entered and calculated with SPSS to assess individual differences in dissonance arousal and reduction in different teachers. Therefore, the quantitative analysis yielded descriptive aspects of teachers' experience of dissonance in contexts with prescribed methodology.

Subsequently, the observations were conducted, and the field notes were analyzed qualitatively, focusing on incidents of tension among

teachers during teaching. These tensions, failures, and difficulties in applying the method were identified and analyzed. Teachers' reactions and classroom management were also noted in the researcher's field notes and used later during interviews with them. The role of teacher observation in this study was critical in order to understand the impact of the dissonance on teachers' teaching practices and spot the moments of tension and low efficiency.

In the last phase of the study, each teacher-participant was interviewed by the researcher to understand the way they deal with such a phenomenon. Interviews were audio-recorded to be analyzed and subjected to thematic analysis to identify the themes and their relationships. By identifying text segments (Creswell, 2008) and labelling them with codes, the researcher listened through the records and transcribed the text segments concerning dissonance components with codes. Then, all codes were used to form and reflect the themes related to dissonance. Finally, based on their frequencies of occurrence, the themes were counted and presented to understand the nature of teachers' thoughts and responses (Kvale & Brinkmann, 2009).

Besides quantitative database analysis, through qualitative analysis, the segments of data were re-conceptualized into thematic groups to identify inconsistencies and dissonances in the teachers' attitudes, beliefs, and possible reflections on their teaching. The results of the data analysis were compared to begin the process of merging two databases (Creswell & Plano Clark, 2011). In other words, the researcher attempted to investigate whether the quantitative data confirmed and supplemented qualitative results by exploring the deeper meanings behind their responses to the questions. The next two chapters present the findings and discussion.

3. Teachers' Dissonance Cognition

This section presents and discusses the results obtained from teacher-participants through the survey, observation, and interview, in order to answer the research questions that were formed at the onset of the research.

The first part contains the results from the dissonance survey, which indicates the status of dissonance arousal or reduction in teachers. Subsequently, the description and field notes of the researcher obtained through class observation as well as teacher

participants' responses to the core questions during the interview are presented. Finally, these results are mixed and collated against existing literature on teacher cognition and cognitive dissonance to discuss the findings of the study.

This study attempted to explore teachers' cognition in a context with a prescribed methodology to understand the impact of dissonance on their practices and investigate the way different teachers cope with it considering their pre-formed belief systems. This is the first study to investigate dissonance with different teachers in a susceptible context regarding cognitive dissonance as the focus point. Previous studies have been conducted in public schools and institutes with teachers, sharing similar professional profiles. The findings of this study provide empirical evidence and validate results regarding the role of dissonance in the relevant literature. They confirm previous findings on the tension experienced by teachers and offer insights on how to manage different teachers effectively in a specific context, an aspect that has generally been lacking in the body of research about dissonance in the EFL context so far.

3.1. Restatement of research questions

The following research questions were addressed in this study to gain a deeper understanding of EFL teachers' cognition in contexts with prescribed methodology from a dissonance perspective.

[1] To what extent do teachers with different levels of expertise (i.e. novice & expert) experience cognitive dissonance in contexts with the prescribed methodology?
[2] How do they recognize and address their dissonance to make it congruent or consonant with their previous beliefs, and thoughts?
[3] How does dissonance affect their practice and demonstrate any obvious signal in their teaching performance?

3.2. Results of the survey

The extent of the cognitive dissonance experienced by teachers

This section addresses the first research question by presenting the results of the dissonance questionnaire, which was used in the preliminary phase of the study. The extent of experience of cognitive

dissonance by different teachers with various professional profiles, as was anticipated, proved to be different. In order to substantiate this hypothesis, the researcher utilized the Dissonance Arousal and Reduction questionnaire that measures two potential aspects of the dissonance (reduction & arousal) through three subscales, namely, effort justification, decision, and induced dissonance. These subscales refer to the three prominent paradigms of cognitive dissonance, which have been investigated experimentally.

In order to limit the perspective of the questionnaire and reduce its focus to research purposes, the teacher-participants were told to consider their professional career in answering the survey questions, before administering the questionnaire. Then, the questionnaires were collected to be analyzed by SPSS software for assessing individual differences in two dissonance components: dissonance arousal and dissonance reduction. After coding the items and extracting the means of six lower-order factors (Effort arousal/reduction, Decision arousal/reduction, Induced arousal/reduction), to assess the reliability of the questionnaire, Cronbach alpha was employed. The following table indicates the reliability of two subscales (arousal & reduction) of the DARQ questionnaire in this study:

Table 14.

The Reliability Statistics of DARQ Questionnaire

Arousal Statistics		**Reduction Statistics**	
Cronbach's Alpha	N of Items	Cronbach's Alpha	N of Items
.839	3	.914	3

To understand the results of the questionnaire, there is a need to elaborate on the main factors comprising this questionnaire. The specification of the three critical components of the dissonance process, namely, "the initial perception of the dissonance situation, dissonance arousal, and dissonance reduction" are the major factors in measuring dissonance; except for the first factor, this inventory utilized the other two factors to differentiate individuals (Harmon-Jones et al., 2009, p. 149).

Accordingly, dissonance arousal and dissonance reduction are considered to be separate but correlated constructs that are examined through three main paradigms of dissonance, as mentioned above. In other words, these constructs (dissonance arousal & reduction) examine two sides of the same phenomenon to distinguish individuals according to their tendency toward one side in diagnosing dissonance. Therefore, to analyze the data, the mean of each subscale was calculated for each teacher-participant to categorize them according to the dissonance level. The results of the questionnaire analysis are presented in the following table and figure.

Table 15 represents the mean of each category for teacher-participants. According to this table, the first group of novice and expert teachers' mean scores of arousal subscales are higher than the reduction ones, which signify their dissonance action, reaction, and cognition in their working context. Although there seems to be no specific mean pattern for a particular arousal category in the standard licensed (SL) group, the novice teachers' mean in the effort and induced arousal subscales appear to be noticeable.

Table 15.

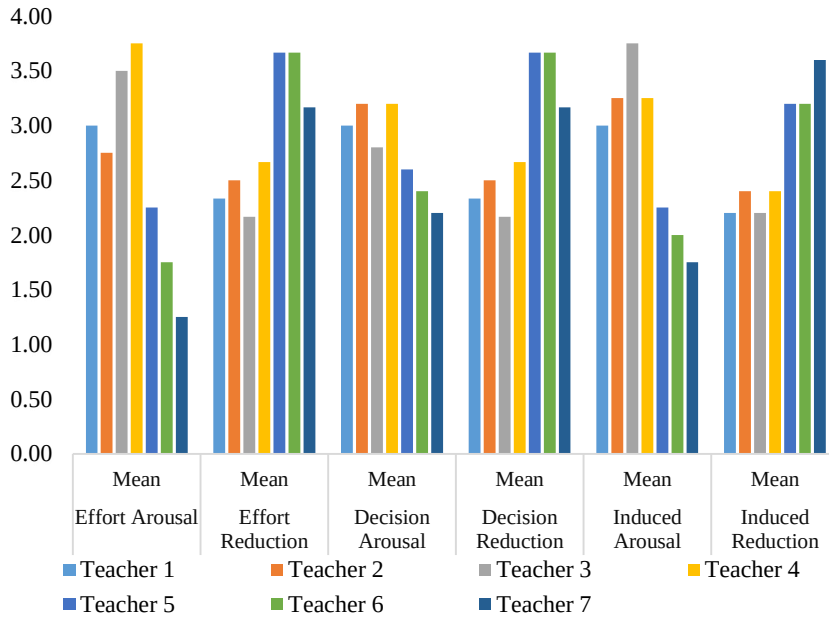
Descriptive Statistics for Each Subscale in DARQ

Teachers		Effort Arousal	Effort Reduction	Decision Arousal	Decision Reduction	Induced Arousal	Induced Reduction
		Mean	Mean	Mean	Mean	Mean	Mean
Expert (SL)	1	3.00	2.33	3.00	2.33	3.00	2.20
	2	2.75	2.50	3.20	2.50	3.25	2.40
Novice (SL)	3	3.50	2.17	2.80	2.17	3.75	2.20
	4	3.75	2.67	3.20	2.67	3.25	2.40
Expert (AL)	5	2.25	3.67	2.60	3.67	2.25	3.20
	6	1.75	3.67	2.40	3.67	2.00	3.20
Novice (AL)	7	1.25	3.17	2.20	3.17	1.75	3.60

The following figure yields a better view of this result.

Figure 8.

Descriptive Statistics for Each Subscale in DARQ



Considering the alternatively licensed (AL) group, there is an increase in the opposite subscale mean scores, which indicates the reduced dissonance cognition for teachers with the alternative professional profile in their teaching career. Effort arousal is the least concern of the teachers in this group.

As you may notice, the first group's rank increases in arousal subscales and decreases in reduction factors. The reverse is true with the second group. The negative relationship between these two subscales is also apparent in the following table, indicating the correlation between dissonance reduction and arousal.

As indicated in the table, there is a negative relationship of -.87 between the dissonance arousal and reduction subscales, indicating that they are inversely related and are separate but correlated constructs (Harmon-Jones et al., 2009). Furthermore, two one-way ANOVA tests were performed to test whether standard licensed teachers' dissonance result is different from alternatively licensed teachers. Results showed that teachers' dissonance means and states are significantly different across the teacher groups.

Table 16.

Correlations of Dissonance Arousal and Reduction

		AROUSAL	REDUCTION
AROUSAL	Pearson Correlation	1	-.874*
	Sig. (2-tailed)		.010
	N	7	7
REDUCTION	Pearson Correlation	-.874*	1
	Sig. (2-tailed)	.010	
	N	7	7

Note. Correlation is significant at the 0.05 level (2-tailed).

Table 17.

ANOVA Results of Arousal Subscale

AROUSAL					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.284	1	2.284	35.596	.002
Within Groups	.321	5	.064		
Total	2.604	6			

Note. The alpha significance level is set at .01.

Table 18.

ANOVA Results of Reduction Subscale

REDUCTION					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.950	1	1.950	79.631	.000
Within Groups	.122	5	.024		
Total	2.073	6			

Note. The alpha significance level is set at .01.

As shown in the tables, the p values (.002 & .000) of the subscales are less than the alpha significance level (.01); therefore, there is a significant difference between the teachers with different licensure in experiencing and responding to the dissonance. As mentioned above, licensed teachers in the first group are the most susceptible teachers to experiencing cognitive dissonance compare to the alternatively licensed teachers who scored higher in the reduction subscales than in arousal ones. This result demonstrates the possibility of experiencing dissonance by SL teachers in prescribed contexts, which may result in diminished efficiency in teaching and behavioural commitment. Although this questionnaire measured cognitive dissonance generally, the researcher attempted to narrow its focus to classroom teaching by asking the participants to respond to the items by considering their actual classroom practice and teaching.

3.3. Observation

The reflection of dissonance in practice

In order to explore the participants' practices, they were observed during their teaching by the researcher. Each teaching session lasted approximately 55 minutes. The focus of the observation, as mentioned before, was limited to identifying the ability of the teacher-participants in implementing the predefined method, his creativity and confidence in employing new activities, and the experience of particular tension or pressure during teaching practice. Therefore, from each subgroup, a teacher-participant was randomly selected and observed. Accordingly, descriptive field notes were taken throughout the observations to detect these issues, and the researcher talked to the supervisor in order to confirm the field notes on the participants' practices and enhance the objectivity of the observation. Furthermore, the researcher had attended the classes to be observed a few times already, in order to neutralize the observer effect and participation, since it is possible that teachers behave differently from their usual practices in the presence of the observer (Woods, 1996).

According to the field notes, the researcher's interpretation, and the supervisor's comments, the following results were obtained for each teacher. In the primary group, a novice (Teacher 4) and an experienced (Teacher 1) teacher were observed by focusing on their experience of tensions. First of all, attempting to identify the ability of the teachers in implementing the prescribed method, the expert teacher

demonstrated a better sense of confidence in managing and conducting the respective techniques and activities. The same goes for the novice teacher with a lesser degree and higher degree of obsession with following the methodology.

For instance, in teaching vocabulary items, as the supervisor pointed out, the teachers should just familiarize them in the vocabulary section and emphasize the items in the passage, but the experienced teacher went further and checked those words at the end of the lesson, signifying their flexibility, creativity, and confidence. In other words, the expert teacher could respond flexibly and better to students' performance cues than the novice teacher and move beyond the defined boundary to attend to a greater variety of instructional activities. The decision patterns of these teachers, as in the literature, are different in prescribed contexts. While the experienced teacher concentrated on the learning side, the novice teacher emphasized the teaching aspects of his practice. I mean the experienced teacher was somehow in control of his students than the methodology, but the novice teacher strictly followed it. Furthermore, the experience of tension was more obvious with the novice teacher than with the expert one, since the novice teacher attempted to accomplish thoroughly what he was asked, even by ignoring learners and their learning. Therefore, it appeared that the sense of not teaching well and the students not learning created tension in some of his conduction of the activities. For example, during teaching the "Four Corners" book and fill-in-the-blanks exercise, teachers were supposed to play a video and give students time to complete the task for vocabulary. The experienced teacher after playing the video worked with the learners through the activity and even checked their comprehension to ensure their learning and then moved on, but the novice teacher, straightly, moved to the reading section after the task completion, which somehow created a stressful environment for children and the teacher himself. However, these assumptions should be confirmed by teachers during the interview, and the main logic behind these activities (i.e. tension, prior beliefs, and experience) should be considered.

In the second group of the teacher-participants, teachers 5 and 7 were observed to understand the reflection of tension and dissonance in AL teachers' practices. Considering the limited pedagogical knowledge of these teachers, it was anticipated that the experience of tensions would also be limited. However, they spent somehow longer

time on similar tasks (e.g., vocabulary exercises) than the previous teachers in the first group and attempted to follow exactly the processes of methodology and techniques to satisfy their supervisors. As the supervisor of the institute mentioned, the experienced teacher always attempts to completely cover the specific task and transmit the subject of the study. According to the supervisor, being behind schedule each semester for the lack of time is the usual complaint and excuse for these teachers. The experienced teacher used monitoring practices to check students' comprehension, a feature that was missing in the novice teacher's teaching. Also, the novice teacher seemed to be unable to analyze the contextual factors and control the learners' track of learning by identifying their emotional and cognitive interests. Lack of experience made the teacher's practice spontaneous in an unexpected situation, which was conducive to having difficulties in managing such situations and adopting the appropriate instructional decision. For instance, the novice teacher by encountering the various questions and the chaos in the class during teaching beginner level simply attempted to skip the task and move forward to avoid further disorder in the class.

Nevertheless, we should not ignore the role of learners in causing dissonance and tensions. For instance, lack of motivation, proficiency, and learning (see Ghasemi, 2021d) by violating and exhausting teachers' expectations and potential may be the major factors associated with dissonance. These factors may intensify teachers' dissonance cognition by blaming the prescribed method and diminish the efficiency of their performance. Considering the self-consistency theory (Aronson, 1968) when a teacher regards himself as proficient and competent without success in teaching, dissonance arouses, and he may attempt to find excuses to create self-consistency (e.g., blaming the prescribed methodology). Therefore, to create consonance, teachers may confuse the main source as with SL novice teachers who often refuse to take full responsibility. The findings in this section should be substantiated and elaborated by the teacher-participants during the interviews, which are presented in the following part.

3.4. Interview

The process of the interview

In order to move deeper into understanding teachers' cognitions, interviews were conducted with each participant. Some questions were

added or omitted during the interview, depending on the flow of the interviews, the individuals, and the sufficiency of the data. All of the participants were interviewed individually, which took almost 15 to 20 minutes.

According to Creswell (2003), the process of qualitative data analysis begins by preparing the data for analysis by conducting preliminary analysis, which yields a deeper understanding of the data, and, finally, representing the data with an interpretation of the larger meaning of the data. Therefore, after transcribing all the audio-taped interviews, the coding process for organizing the materials into chunks started by categorizing text data and labelling it with a term according to teachers' actual language, before bringing meaning to those chunks (Dörnyei, 2007). Then, based on the literature and interaction with the data, initial categories for analysis were developed and refined. In order to calculate inter-coder reliability, I invited a master's degree holder to check 20 per cent of coded transcripts in order to determine the agreement between identified codes. A 97% rate of agreement and inter-coder reliability was achieved for the coded transcripts. After modification and refining the categories, the major findings were presented based on these categories. The following themes were extracted based on the interpretation of the data and categories.

Extracting major methodological issues

- **Teachers' low methodological awareness:**

Teachers' methodological knowledge about the prescribed methodology was assessed to be insufficient both theoretically and practically, specifically in alternatively licensed teachers. For example, when asked to clarify the theoretical and methodological aspects of their practice, teacher 6 asserted that:

> *I just follow the exercises in the book and the techniques that I am told. I try to follow the procedure of the method and the book, and I don't know much about the theoretical and methodological aspects (T6).*

Although there seem to be several preservice educational programs for the new teachers, presenting the sum of the techniques and activities from the practical perspective is the foundation of these sessions, which lack the required justification and theoretical understanding for

the respective methodology. Additionally, applying some of these techniques seems to be demanding and imposes stress on teachers when they consider themselves not competent enough to manage it, which is conducive to exhaustion by both teachers and students. This aspect is reversed in standard licensed teachers, particularly for the novice teachers who asserted that the techniques are somehow outdated and restrict them and their potential in the class, which yields inefficient teaching practices and diminishes their motivation. Considering the SL expert teachers, although they attempt and believe in adhering to the values and practices of the institute, in some situations, they are compelled to apply other supplementary techniques to keep the students motivated and interested. For instance, teacher 1 expressed some situations in his teaching career where he had to use several interesting techniques he knew from other methodologies to meet students' desires, needs, and expectations, since the techniques presented in the preservice educational courses are kind of fit-to-all prescriptions that do not have the potential to be executed in the classroom.

- **The inevitable impact of the prescribed methodology:**

The impact of the prescribed methodology was reported to be different for various teacher-participant groups. For AL teachers, such prescriptions could be an initial step in acquiring a pedagogical understanding of teaching. Therefore, they do not have to devise or find specific techniques to follow, and such a prescription could serve their purpose very well. Although they experience some difficulties at the beginning, as teacher five pointed out, these difficulties motivated him to try to understand the pedagogical aspect of teaching and study to refine his practice. Regarding the first group of the study (SL), the novice teacher-participants talked about their initial experience of the method, which turned out to be somehow embarrassing when applying the techniques during teaching, since they had many pedagogical and methodological plans and maps to operationalize and experience in the class to examine and spot the best of those to utilize in their classes. They asserted that they were unsatisfied with the result and blamed the prescription applied by the methodology and attempted to free themselves of such boundaries and teach their own way. However, at the present time, their commitment to the institute's values appears to be increased, since they follow the procedure and the

techniques as they are told. Considering the experienced SL teachers who appear to conform to the methodology, they have attempted to minimize the impact of the prescribed methodology by utilizing their potential in understanding the pedagogical consequences of their decisions and keeping themselves and their students motivated. However, as teacher two mentioned, lack of decision-making power creates tension in teaching practices for various reasons, such as the availability of a better technique or activity to engage students.

> *It is sometimes irritating when you know a better technique and activity to follow or work with students according to the situation, but you have to match yourself with the rules (T2).*

In short, the teachers (both novice & expert) of the first group acknowledge the impact of the prescribed methodology on their practice. Therefore, the impacts of prescriptive practices, both for good and bad, are inevitable.

Understanding the essence of dissonance in teachers' cognition

- **Experiencing tension:**

As the AL teachers declared, there are some situations where they think or wonder what they should do to teach efficiently, particularly when encountering problems with students' learning, which may lead to the experience of tension and stress. But, this tension appears not to be due to dissonance. Although they have, also, some core beliefs and pedagogical notions shaped through their exposure and experience of the language, the conflict between these beliefs and the present methodological prescription is ignorable, which is evident in teacher 5 comment:

> *Despite the fact that every teacher has his own way of teaching, as I do, the current method seems to be more academic which helps us to determine what to do in the class and how to manage the activities (T5).*

The same goes for the novice teachers who attempt to adopt the method and act accordingly to satisfy their supervisor by indicating respect for the institute's values. However, considering their teaching

ability and difficulty in managing some of the activities, which may even result in confusing outcomes or situations, the prescriptive methodology may reduce these teachers' efficiency both cognitively and emotionally. As these situations seem to be rare, therefore ignorable again, but shall be regarded anyway.

> *There are situations in which I don't achieve any result, and the students don't get the point very well. I try my best to conduct the activity well next time. Such situations happen rarely but happen (T6).*

The main portion of the tension, as was anticipated, is experienced by SL teachers who have formed, reformed, and refined their core beliefs and cognition on teaching with the recent advancements in the field. For instance, teacher 2 pointed out that:

> *I don't understand why they (the institute's founders) ignore the fast progress of the teaching field and use the old methodology in teaching English exclusively without considering other important factors involved in learning a language such as the students' background and teachers' ability or the materials to be taught (T2).*

With such an opinion about the values and rules of the institute, the experience of tension is predictable. When asked about the feeling of stress and tension during teaching and implementing the methodology, the experienced teachers described the situations in which they have to decide among or between options available for them to teach the materials.

Therefore, they attempt to reserve (and sometimes utilize) an alternative option, in case of necessity, and use the prescribed technique first to indicate their adherence to the institute's values. However, it appeared that they were not successful in obtaining the supervisor's satisfaction but successful in controlling and managing the class and the students. Also, the experience of tension intensifies when the supervisor interferes with the class processes and activities.

> *I really appreciate the supervisor's comments, but at some points, his comments ignore students' learning (T1).*

Therefore, these teachers attempt to conform to the institute's rules

and values and, at the same time, avoid tension by reserving and sometimes utilizing alternative techniques to supplement the previous ones. However, avoiding tension is not possible every time because there could be no plan B at all, or applying it may not be possible and provoke tension eventually. Also, as they already consider the impact of the methodology on their practice and blame it for any inefficiency, experiencing tension is again inevitable, even if it occurs occasionally.

Regarding novice SL teachers, we should consider the following assertion, which may indicate the consequences of tension and prescriptive methodology.

> *If the institute prescribes the method, no problem we do it, but they should take responsibility for the students' progress and learning. I'll do my job as I'm told, the rest doesn't concern me (T3).*

Obviously, this teacher attempts to relieve the tension through justification and cognition change, which are the usual strategies for dissonance reduction. Responsibility denial to change the dissonant cognition (Gosling et al., 2006) is a method utilized by this teacher to avoid tension. However, during the process of teaching, the pre-formed dominant beliefs may yield unexpected tension for this teacher as in decision processing or effort justification. According to teacher 4, adapting the method may take time for teachers, but "its odd feeling" (tension) during teaching would not disappear since it imposes certain rules that "directly oppose our knowledge".

- **Justifications presented:**

Interviewing teacher-participants provided interesting and different justification strategies for each subgroup of participants according to their professional profiles. First of all, AL teachers attempted to totally ignore the new information and approach to avoid any conflict between the cognitions. In other words, the novice teachers in this group were unaware of incompatible beliefs between their belief systems and the new approach, until it was directly pointed out during interviews by the researcher. After accepting their experience and exposure to be different from the institute's values, they simply ignored the conflict and emphasized the present position as the desirable and final objective. Although they already had some complaints about the prescribed techniques and activities, they considered such difficulties

as the usual challenge of teaching that should be managed.

Accordingly, the experienced teacher in this group emphasized the logic for prescribing the methodology and his attempt to conduct it faultlessly. This teacher appears to change his mind and ideas toward the methodology by justifying the methodology and values to be in line with his own and acting accordingly. Therefore, this teacher could be an example of resolved dissonance and consonant cognitions.

Considering the SL teacher participants' cognition about their teaching practices or the conflicts between their belief systems and their practices, it seems that they have chosen to live along with dissonance and continue their career with dissonance in spite of the inconsistency without value and cognition reconstruction. This fact was confirmed when experienced teachers attempted to adhere to the institute's values and use an alternative plan at the same time if the original values fail. This means that they have designed a priority scheme to be used that determines their practices and refines their original values if needed. Therefore, they adopt the third method (Festinger, 1957) to add consonant cognition by altering their practices sometimes and considering the contextual and learners' factors in the class. However, this may not always be possible, as mentioned before, and this strategy may fail to serve its purpose.

Furthermore, the expert teachers appear to get used to dissonance and attempt to justify their practice by declaring their commitment to the institute's values and acting accordingly. The novice teachers in this group have adopted different strategies to justify their teaching practice. These teachers have complex cognitive processing by trying different means to add consonant cognition to create consistency. By responsibility denial, they attempt to deny any inefficiency in their teaching by blaming the methodology and its consequences. Furthermore, by ignoring the mismatch between their beliefs systems and institutes' policies, these teachers try to relieve the high experience of dissonance, and as teacher three pointed out in answering the fourth question:

> *Having a job as a teacher and its prestige is more important for me than the prescribed methodology and I suppose I should do my job as they want me to do, the rest is not that important now (T3).*

As you may notice, the dissonance gap for this teacher was large

enough to reject the mismatch and conflict between his cognition and action and find a justification to reconstruct or block the core beliefs and values, even temporarily.

Regarding the general principles for the analyses of the qualitative data in this study, the researcher attempted to make an appropriate interpretation of the data by conveying his personal understanding, knowledge, and experiences of the data as well as his research assistant by comparing and refining the findings of this study with those from previous literature.

4. Discussing Major Effects

To what extent do teachers with different levels of expertise (e.g., novice & expert) experience cognitive dissonance in contexts with the prescribed methodology?

The answer to this research question is based on the results from both the DARQ questionnaire and interviews with teachers. Generally speaking, these sources of data validate the results of this question on the level of dissonance experienced by the teachers through triangulation.

The results indicate that standard licensed teachers are the most susceptible teachers in the contexts with the prescribed methodology to experience dissonance. Although we may not find significant difference patterns between SL novice and expert teachers, novice teachers seem to rank higher in the subscales of the questionnaire, which was confirmed by the interviews. In the interviews with SL novice and expert teachers, the level and the depth of dissonance and the range of justification strategies of novice teachers for reducing the dissonance were considerably different and higher than that of expert teachers. Applying different and more methods to reduce dissonance could signify the depth of experience of this phenomenon by the individuals, which has been demonstrated in SL novice teachers. This fact demonstrates the long-standing impact of the dissonance through teachers' professional careers since both novice and expert teachers experienced (although not at the same rate) dissonance in their teaching practice. As Crawley and Salyer (1995) pointed out, teachers' beliefs about teaching and learning can exert a persistent long-term influence on teachers' instructional practices; the same holds true about dissonance and its extended impact on teachers. In other words,

since the experienced teachers were not completely successful in reducing dissonance throughout their professional careers, we may, certainly, declare that teachers have decided to get along with dissonance (see Pedder & Opfer, 2013). According to the result of the interviews, SL expert teachers enjoy more independence in their practice by relying on their experience and confidence in understanding the needs and interests of the learners, the very characteristics that novice teachers lack and experience more dissonance in their practice. Therefore, experienced teachers dare to modify some of the prescribed procedures and activities sometimes, if possible, in order to reduce the dissonance effect by following their belief systems and perceptions of the class. According to Richardson (1996), teachers' beliefs about teaching and learning may outweigh the effects of teacher education; this fact holds true for SL teachers' educational programs in prescribed contexts, which failed to result in a change in teachers' beliefs and attitudes toward the institute's policies and values in this study.

Furthermore, the discrepancy between experienced teachers' beliefs and actions has been studied by Phipps and Borg (2009) who explored the tensions between teachers' grammar teaching beliefs and practices, which lends support to the findings of this study. As cited in this study, teachers' beliefs exist as a system of core and peripheral beliefs (Pajares, 1992). Therefore, it can be assumed that SL experienced teachers' core beliefs remain intact throughout their teaching career, and their peripheral beliefs are modified to suit the specific context as in this study. However, SL novice teachers' both core and peripheral beliefs are persistent to change and a reorientation toward the prescribed methodology, which may yield cognitive dissonance. As you may notice, the findings of the earlier studies (e.g., Ghasemi, 2021a) that research the same phenomenon confirm and match the results of this study in demonstrating the experience of the tension and dissonance in teachers' beliefs and practice.

Regarding alternatively licensed teachers, the questionnaire results are clear in indicating the dissonance level experienced by this group. These teachers scored relatively low on the arousal subscales and high on the reduction subscales, signifying their reduced or no dissonance state in their teaching. These results were also collated with the interview findings to understand their validity. According to the interviews, the AL teachers find prescription as a reference or

beginning point in their way of professional teaching to acquire pedagogical knowledge, which makes their task much easier. Although novice teacher-participants of this group had some difficulty implementing the methodology, they, generally, considered such challenges to be the essentials of teaching. In other words, such challenges of teaching are crucial factors in deciding who they want to be as a teacher, what they care about, value, and conduct in classrooms with students (Ayers, 2001). This aspect of AL teachers' cognition has not received due attention in the literature, and teacher training programs proved to be insufficient for these teachers, which needs further investigation. All in all, the experienced teachers who had grasped the methodology appeared to think consistently along with the method and attempted to act accordingly. However, the novice teachers in this group experienced some tensions during teaching due to a lack of practical and theoretical understanding and knowledge of the methodology.

In short, licensure, experience, and professional profile have significant relationships with the extent to which teachers in prescribed methodology contexts experience dissonance. The results of both measures in this study reported, almost, the same outcome by considering the first group as the susceptible class of teachers at risk of experiencing dissonance.

How do they recognize and address their dissonance to make it congruent or consonant with their previous beliefs and thoughts?

There was an obvious distinction among the participating teachers regarding the way they encountered cognitive dissonance in classroom teaching. As mentioned before, teachers' beliefs exist as a system of core and peripheral beliefs (Pajares, 1992), and the impact and resistance of the core beliefs are more evident in behaviour than peripheral beliefs (Phipps & Borg, 2009), which are susceptible to be altered and suit the particular practices, as reported in this study. The experienced teachers in the first group seem to reorient their peripheral beliefs successfully according to their contextual obligations and preserved their core beliefs intact, which appeared to enhance their critical thinking ability because they provided more detailed and academic explication, analysis, and evaluation by questioning their practice and methodology during the interview and seemed to think

and learn from their classroom experience to enhance their efficiency. However, Galman (2009) considers dissonance to be different and the consequence of critical reflection by stating that:

> *While critical reflection is a skill and capacity to be developed in teacher education, dissonance is the cumulative effect of any and all experiences that create internal conflict for students, including but not limited to the encouragement of critical reflective capabilities. (p. 471)*

But, according to the interview results, the researcher concluded that there is a bidirectional relationship between critical reflection and dissonance since without the one the other could not exist. However, there should be some basic conditions to approve this relationship, namely, the conflicting situation, critical evaluation, and internal motivation to yield dissonance to result in critical reflection. Of course, this assumption needs more research-based investigation to be confirmed. These teachers attempted to utilize the second reaction and method proposed by Festinger (1957) in reducing cognitive dissonance by modifying and rationalizing their practice (new information) to suit their core beliefs. According to Johnson (1994), teachers' core beliefs of teaching have a powerful effect on teachers' pedagogical decisions; which was, also, true about the SL experienced teachers in this study.

However, applying this method is not easy and possible always, since deciding and conducting the right activity or technique was a demanding and time-consuming task, considering the constraints of the institute and methodology. These difficulties could give rise to decision and effort arousal since decision alternatives and the success of a particular activity play an important role in decision and effort justification. The questionnaire results, obviously, indicate such conflicts in arousal subscales, signifying the difficulties that teachers may encounter in their teaching practice. According to the class observations, such teachers attempted to employ an extra post activity to check students' comprehension again, which had not been prescribed by the methodology. Therefore, we may conclude that SL experienced teachers try to utilize their expertise and knowledge to modify their practice to justify their teaching and belief systems in contexts with a methodological prescription. This finding elaborates on Borg's (2003) comment that "behavioural change does not imply cognitive change" (p. 91).

The novice teachers of this group experienced a high level of dissonance, making them call for reduction and attempt to employ strategies such as responsibility denial and mismatch refusal. In fact, these teachers took the third reaction proposed by Festinger (1957) by accepting the new information and methodology as accurate but refused to change their original beliefs (including both core and peripheral beliefs), which were conducive to creating a continuing, or unresolved state of dissonance.

In addition, they attempted to justify their teaching practice by denying their responsibility for the student's learning by imposing it on the institute's side and the methodology they adopt. Also, ignoring the conflict and the mismatch due to other "more important factors such as the job and the salary" make them pursue their career in the institute. Among all teacher-participants of this study, it can be assumed that these teachers were, also, more emotionally involved in the prescribed methodology and institute's values, which imposed unjustified obligations on teachers. They had motivational issues in pursuing their professional studies and career that encouraged them to learn to teach well. This emotional aspect had been blocked by factors that constrain their practice. Lacking motivation in such situations would demand even more effort and more of their time, which is conducive to effort arousal and induced compliance arousal, as is evident in the questionnaire's result. Furthermore, teacher motivation has been considered to be a significantly positive factor in students' learning and achievement (Dörnyei, 2005; Ghasemi, 2021d). The decrease in commitment toward the learners is an inevitable aspect of these teachers' practices that should receive due attention from the institute's authorities. These factors are the principal issues of these teachers that they attempt to alleviate through cognitive dissonance reduction strategies.

Due to the lack of mismatch, the alternatively licensed teachers of this group did not use any cognitive dissonance strategy to relieve it, despite their deficient pedagogical knowledge, which created some difficulties for their practices. However, ignoring these teachers' prior beliefs, which have been shaped during their experiences as learners, may also result in dissonance. Accordingly, these teachers appear to take the fourth reaction (Festinger, 1957) by modifying their prior beliefs and, also, considering the new information accurate, which would eliminate any trace of dissonance. According to Borg (2003), in

order to shape teachers' cognition, teacher training programs should consider their prior beliefs.

This study clearly indicates the sort of inconsistencies experienced by the teachers in their beliefs and actual class practices and the strategies they employ. No need to mention that the influence of SL experienced teachers' beliefs on their practices was much more than that of the inexperienced ones.

How does dissonance affect teachers' practice and demonstrate any obvious signal in their teaching performance?

The practice of the teachers in this study was influenced by several factors, such as dissonance beliefs, professional motivation, and contextual factors. According to Thompson (1992), besides observing discrepancies, the researcher must question the extent of teachers' awareness of such discrepancies by preparing them to explain discrepancies, which may reveal various sources of influence on their instructional practices that cause them to subordinate their beliefs. In addition, awareness of dissonance can result in what Woolfolk Hoy, Hoy, and Davis (2009, as cited in Pedder & Opfer, 2013, p. 545) call a "change provoking disequilibrium," which refers to the dissonance between what teachers regard as significant for enhancing the quality of their students' learning and perceptions of current professional learning.

Therefore, both observation and interview data are used to answer this question. Despite the contextual constraints in institutional settings that imposed certain practices, the dissonance between teachers' beliefs and actions appears to be a major source of influence, which is, also, reflected in the teacher participants teaching. According to the observations, SL experienced teachers attempted to reduce tension and dissonance by employing modified practices. By doing so, their core beliefs seem to find symmetry with their peripheral beliefs, at least temporarily. This indicates, also, a kind of conflict, since they subordinate the institute's policies and contextual constraints to their own beliefs. Based on the interview results, these teachers were aware of dissonance and mismatches between their beliefs and practices, which had provoked them to change and suit their actions toward their beliefs to meet their standards and professional principles by considering the contextual factors (institute's values) as well as the

learners in their teaching practices.

Accordingly, we can consider these teachers as those who experienced "change provoking disequilibrium" in their professional careers in contexts with prescribed methodology. A lot of studies have considered the sources of mismatches between teachers' beliefs and practices and presented different factors such as contextual factors (Fang, 1996; Pajares, 1992), real-life factors (learner behaviours, time, resources, & course contents; Ajzen, 2002), and external "stressors" (work overload, time restraints, working conditions, lack of resources, etc.; Borg, 1990). Besides these factors, teachers' standards and professional principles may be significant sources of mismatches, as was found in this study for the first group of participants.

The SL novice teachers demonstrated the effect of reducing strategies of dissonance in their practice by sticking to the methodology and following its procedure, in order to ignore and deny their responsibility and the conflicts they may feel during teaching. Although they were aware of dissonance and conflict they experienced during their practices, which caused disequilibrium, these teachers could not modify and rationalize their practice according to their context to experience "change provoking disequilibrium" in their teaching by considering the learners and potential learning opportunities. Furthermore, they attempted to preserve self-consistency by not questioning their abilities or the self (see Aronson, 1968). In other words, violating positive self-concept with negative performance would yield dissonance because of the importance of the correspondence between performance and self-concept (see Harmon-Jones & Harmon-Jones, 2007). According to the self-affirmation theory proposed by Steele, in order to preserve the equilibrium and the integrity of their ideas about themselves, people have to rationalize their actions by adding information or finding excuses (Cooper, 2007). By denying the responsibility, they would deny the consequences of their teaching practices, which may be different from their expectations. In addition, this aspect of SL teachers' cognition is in line with Crookes and Arakaki (1999) research, which concluded that teachers might opt for instructional practices based on the specific contextual factors and conditions despite their contrast and conflict with their beliefs.

Finally, the AL teachers experienced some difficulty in conducting some specific activities that had not been covered in the teacher

training programs properly. Their practices can be considered to be compatible with their beliefs, not considering the basic assumptions they had formed during their exposure as a learner. However, these teachers may, also, experience some degree of dissonance, since these teachers lack reflective ability in their teaching and approaches to their department (Postareff et al., 2008). Therefore, to protect the equilibrium and their self-systems, they indicated to welcome challenges by applying the methodology based on the institute's values, despite some difficulties they might experience.

As a result, we may compare and understand the teacher participants' characteristics by referring to the expert and novice teachers' specifications represented by Tsui (2003), in order to understand the role of expertise in dissonance. The first distinctive characteristic is efficiency in processing the information in the classroom. Unlike novice teachers, expert teachers are able to make sense of and recognize patterns in a large quantity of simultaneously transmitted information within a short period of time. This characteristic was a determining factor in dissonance arousal since the expert teachers in the first group could manage their dissonance by evaluating and recognizing the class and the students' needs and modifying their practices accordingly. This characteristic was absent in the novice teachers' practices who appeared to struggle with the methodology by ignoring the critical factors in their teaching.

The second feature demonstrated by Tsui was selectivity in processing information. For instance, expert teachers are more selective in what they process, such as considering students' learning as the most important criterion for selection. This aspect was respected by SL experienced teachers in this study who considered the learners rather than the methodology as the focal point in conducting their practice. The third characteristic is the ability of expert teachers to improvise. This aspect indicates the expert teachers' good ability in responding to student needs and classroom events, which require decisions and actions by their well-established routines to respond to a variety of unanticipated events. This is exactly what the SL experienced teachers attempted to do to reduce their dissonance.

Finally, expert teachers' deeper and principled representation and analysis of problems helped them to offer interpretations and solutions that are guided by principles. This is the only prominent feature for experienced teachers, which makes them analyze the problem (i.e.

prescribed methodology) and reorient their cognition to suit their practice and reduce the dissonance. Therefore, the expertise of the teachers can be considered a crucial element in resolving or reducing dissonance and cognitive inconsistencies. By contrast, novice teachers' information processing system is still being developed and lacks such characteristics in the process of decision-making.

5. Concluding Points

In this section, I will summarize the major findings of this study. Then I will discuss the implications of these findings for EFL teacher education and teacher development in Iran. Finally, I will end with recommendations for future research.

5.1. Summary and conclusion

According to Phipps and Borg (2007), identifying differences, or tensions, between teachers' beliefs and practices is not sufficient for language teacher cognition research; rather, attempts need to be made to explore, acknowledge, and understand the underlying reasons behind such tensions. Therefore, this study attempted to investigate teacher cognition in contexts with the prescribed methodology to explore their experience of dissonance through a mixed-methods approach. The underlying reasons and strategies for experiencing dissonance were discussed in the previous chapter, which suggested that teachers' expertise or experience, licensure, and contextual issues could be the significant and predictive factors of dissonance.

The findings indicated that the first group attempted to live along with dissonance and continue their career persistently, which was conducive to a reduced and resolved state due to their enhanced confidence and experience with the methodology, in spite of continuous problems with their decisions and practices. Based on the action-based model (Harmon-Jones & Harmon-Jones, 2007), after evoking a negative affective state by dissonance, which motivates the individuals to engage in behaviour to correct the problem, individuals often cope with it either by the commitment to the behaviour or decision to reduce dissonance. Therefore, living through dissonance with commitment would increase the possibility of resolution and reduction. In other words, recognizing inconsistencies between values and practices may motivate teachers to learn (Pedder & Opfer, 2013); and perhaps find a solution. During the interviews and observation,

the expert teachers conducted activities and talked with a sense of confidence and had justification for their practice when they violated the institute's values; which implies the importance of 'cognitive conflict' in teachers' thinking (Cobb, Wood, & Yackel, 1990, as cited in Pedder & Opfer, 2013). Teachers in prescribed methodology face challenges to their approach and thinking that are demonstrated through cognitive conflict, and this may motivate them to reconstruct or refine their practice and beliefs and even to develop new practices by unlearning what they believed and do to satisfy the situation (see Pedder & Opfer, 2013). In fact, the conflict between values and practices prompted the experienced teachers to re-examine their professional learning practices and values in order to bring practices and values into closer alignment, which is accomplished by modified practices during class observation.

Considering SL novice teachers in this study, these teachers regarded the imposing methodology as inappropriate in comparison to their pedagogical beliefs by ignoring the new information during their teaching. The dissonance gap in these teachers was evaluated to be large enough to dismiss the new ideas. Evidence of such rejection and their influence on teachers' work has been noted in previous research (e.g., Coburn, 2001).

Although nowadays, institutes attempt to determine their own policies and methodology by prescribing and imposing certain methods, they appear to ignore an important facet of teachers' professional practice, which influences their whole career and development in the field (i.e. their cognition). Despite these constraints and their respective influence on various teachers, we may conclude that these prescriptions should conform to the teachers' standards or, at least, refine their beliefs in advance to enhance their efficiency in the class. In brief, the researcher believes that the institutes with a prescribed approach may consider Parker Palmer's (1998) perspective of teaching as a reference point in defining their values that "good teaching cannot be reduced to technique; good teaching comes from identity and integrity of the teacher" (p. 10).

5.2. Implications

According to the results of the study, it is suggested that teachers should not be made to give up their beliefs during the in-service program since, as it has been observed, they will attempt to refine their

practice as they move through the course. Also, they, themselves, should be enabled to balance their preferences with the new methodologies. Regarding AL teachers, teacher education programs are advised to teach the unplanned aspects of classroom practice and classroom management skills by enhancing their pedagogical knowledge through their teaching or in-service program, since difficulty in conducting some techniques properly was observed to impose some problems on these teachers. In addition, teachers' interactions and reflections with each other, particularly among teachers with different specifications during teacher education programs and in-service teaching may prompt novice teachers' cognition to consider alternative aspects of contexts with specific constraints to move toward equilibrium in their practices. Accordingly, it is strongly recommended for institutes to consider teachers' dissonance by enhancing their awareness of dissonance and encouraging reflective thinking among them by provoking resolution to enable them to pass through the "change provoking disequilibrium" stage to achieve equilibrium in their teaching practices in contexts with prescribed constraints. Finally, teaching experience could be considered a credible criterion to employ teachers in contexts with prescribed methodology because the experienced teachers proved their ability in modifying their practice to the benefit of the students and their learning as well as adhering to the values of the institute.

5.3. Suggestions for further research

Despite these limitations, the results of this study point in promising directions. Therefore, to advance research on teacher cognition and cognitive dissonance, understanding the link among teachers' reflection, dissonance, cognition, habitus, and professional development can provide valuable information for teacher policymakers and requires more empirical investigations to substantiate their roles in teacher education.

6. Appendix A

6.1. Interview questions

Methodological issues (Extracting major methodological beliefs)

[1] Which method do you use to teach here? Could you please explain the method (theoretically and practically)?
[2] Have you been successful in implementing the method?
[3] Do you find the current methodology effective for yourself and your students?
[4] What is your favourite method? Have you ever used that method in class?
[5] How do you feel about the department's values?
[6] How do you feel about the current methodology and policy of the institution?
[7] Will you choose another method if you could?
[8] What about your performance? Is it influenced by the prescribed methodology? How?

Cognitive Dissonance

[9] Do you find teaching in this institute a desirable and pleasant activity?
[10] Do you enjoy teaching? Why? (effort justification for desirable outcome = dissonance reduction; Harmon-Jones, E. & Harmon-Jones, C., 2007)
[11] Do you feel any discomfort during teaching? Do you feel any tension when students fail to learn the subject matter?
[12] If so, how do you deal with this conflict in your mind and practice? How did you relieve the tensions (dissonance resolution; Festinger, 1957)?

- Change your mind about the method
- Change your practice
- Justifying your practice or method
- Ignore the conflicting cognitions

[13] How do you satisfy yourself to go on and continue to use the prescribed methodology?

[14] Do you consider yourself responsible for students' learning? (Responsibility denial = dissonance reduction; Gosling et al., 2006).

[15] What did you expect at first before implementing the methodology? Were you right? (Expectation violation = dissonance arousal; i.e. Gosling, Denizeau, & Oberle, 2006).

[16] What about now, how do you feel about the teaching practice and methodology? (Commitment to the behaviour = attitude change = reduced dissonance; Harmon-Jones et al., 2009).

VII. CONCLUSION

Through presenting some of the key psychological concepts in language teaching, I attempted to provide a concise introduction to the role of psychology in language teaching and learning. As is evident, teaching and psychology are two intertwined disciplines that affect our understanding and views of the principles of teaching. Reading, learning, and playing with psychological concepts could be really enjoyable tasks for novice researchers who are new to the field and look around for new insights and concepts to test and research. This book was a pleasure for me since I was trying to find a detour to understand practical solutions for students' and teachers' daily emotional and psychological difficulties in mutual understanding of each other. Teaching and learning a foreign language is a complex and demanding process in which we need psychology to explain and demonstrate the map and the processes involved by presenting specific cues and solutions for possible difficulties. In short, without psychology, we may lose our way in the intertwined and vast milieu of teaching and learning context. In this section, I attempt to provide a brief summary of the presented studies and conclude the book with insights for further research and readings.

In the first part of the book, it was indicated that emotional intelligence and suggestion had proved their potential role in the quality of individuals' life both personally and professionally, particularly in academic endeavours of students to achieve satisfaction with their overall accomplishments. The first study was an attempt to

add to the literature through an exploration of the interaction effects of emotional intelligence and suggestion on students' reading comprehension and to determine whether these variables correlate with each other or share a role in determining their score in a reading comprehension test. Since the notion of academic achievement is heavily grounded in the psychological and emotional preparation of students, this study may add evidence regarding the effect of emotional intelligence and suggestion on students' emotional state. In addition, if certain competencies are deemed to be more prevalent among these students, it could have potential implications for teachers to utilize and interact with these competencies and try to know and aid their students in their pursuit of academic goals.

In a nutshell, there is an abundance of research studies attempting to pinpoint a formula for effective emotional management, resulting in a myriad of emotional and affective theories and models. Each new study expands the knowledge base of what it means to be an emotionally intelligent person and clarifies the impacts of feelings on student achievement.

Based on the other study, dissonance could be a major source of tension and frustration when there is an inconsistency between teachers' beliefs and practices (Phipps & Borg, 2009). In addition, the specific role of contextual factors has been considered to detect the consistency/inconsistency of teachers' beliefs and practices by different researchers (Spada & Massey, 1992; Crookes & Arakaki, 1999). However, the impact of dissonance on different teachers with various professional profiles and the way these teachers respond and experience dissonance through their professional development had not been investigated to understand its influence, particularly when contextual constraints have dominance over teachers' beliefs and practices. Therefore, the main concern of the third inquiry was to consider the impact of cognitive dissonance in prescribed contexts where certain practices are imposed to limit teachers' beliefs and teaching practices of novice and expert teachers who may respond differently to this common phenomenon in their transition to be experienced teachers. This aspect of teacher cognition lacked in the literature, which needed further investigation to understand different teachers' cognitions and feelings in such contexts to study the efficiency of teacher education programs in refining these teachers' beliefs.

Overall, there are many psychological terms wandering in language teaching research that have advanced and influenced the field significantly. These concepts such as motivation, perception, self-efficacy, cognition, emotion, personality, intelligence, learning styles, attitude formation, anxiety, teaching style, etc. contributed considerably to our understanding of various complex processes involved in teaching and learning. I hope this book would do its duty to the readers by demonstrating the interesting part of teaching and learning with psychological perspectives in vision.

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INDEX

The scope and purpose of educational processes have been heavily modified under the influence of psychological breakthroughs and their developmental perspectives in recent decades. This book is an attempt to address some of the key psychological aspects in the literature classified into emotional, cognitive, and psychological perspectives with a particular concentration on language teaching. By presenting detailed empirical studies on the covered topics, I attempted to indicate the intertwined relationships between language and psychology in educational settings. The first study deals with the impact of teacher-directed hypnotic suggestion on students' emotional intelligence and their academic performance. The second study introduces simplified tests to coordinate the helpless attitudes of the students. In the last research, I examined the interaction effects of the contextual factors and teachers' professional profiles on their cognitive orientations with a specific focus on teachers' dissonance belief systems. Overall, this book provides an overview of the functions and influences of the psychological concepts in educational contexts, particularly language teaching.

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