PNU University

English In Psychology 2

(Psychology Department)

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پیشگفتار ناشر

کتاب‌های دانشگاه پیام نور حسب مورد و با توجه به شرایط مختلف یک درس در یک یا چند رشتهٔ دانشگاهی، به‌صورت کتاب درسی، متن آزمایشگاهی، فرادرسی، و کمک‌درسی چاپ می‌شوند.

کتاب درسی ثمرهٔ کوشش‌های علمی صاحب اثر است که براساس نیازهای درسی دانشجویان و سرفصل‌های مصوب تهیه و پس از داوری علمی، طراحی آموزشی، و ویرایش علمی در گروه‌های علمی و آموزشی، به چاپ می‌رسد. پس از چاپ ویرایش اول اثر، با نظرخواهی‌ها و داوری علمی مجدد و با دریافت نظرهای اصلاحی و متناسب با پیشرفت علوم و فناوری، صاحب اثر در کتاب تجدیدنظر می‌کند و ویرایش جدید کتاب با اعمال ویرایش زبانی و صوری جدید چاپ می‌شود.

متن آزمایشگاهی (م) راهنمایی است که دانشجویان با استفاده از آن و کمک استاد، کارهای عملی و آزمایشگاهی را انجام می‌دهند.

کتاب‌های فرادرسی (ف) و **کمک‌درسی** (ک) به منظور غنی‌تر کردن منابع درسی دانشگاهی تهیه و بر روی لوح فشرده تکثیر می‌شوند و یا در وبگاه دانشگاه قرارمی‌گیرند.

مدیریت تولید محتوا و تجهیزات آموزشی

Contents

Preface

This book is designed to show the reader how psychology has developed over its relatively brief period as a science. It presents some of the areas which are the concern of the contemporary psychologists. It takes an active learning approach and includes vocabulary lists and definitions, reading passages, and practice tests. All materials in this book are designed to help students fully grasp the material in the text by shaping study skills.

Chapter One

Thinking

General aims

This unit will enable students to acquire:

1. Students develop reading skills including skimming and scanning.
2. This chapter aims at raising students' general proficiency in English to a level appropriate for university study.

Behavioral objectives

The present lesson has two specific aims:

1. Define the meaning of the following general words:

astray, combine, consume, contradict, hazard, irrelevant, logically, manipulation, prevent, sound, typical, willingness

2. Define the meaning of the following key words:

concept, confirmation bias, critical thinking, daydreaming, deductive reasoning, framing, inductive reasoning, premise, proposition, prototype, reasoning, remember

3. Translate this lesson (thinking) into Persian.

Word study

Study the following definitions, synonyms and examples

General words

Astray (adv): to become lost or go to the wrong place; off the right track; unfavorably

The boy was led astray by bad friends.

Combine (v): if you combine things or they combine, you use, do, or put them together; join together

Some teaching methods combine education with activity and sport.

Consume (v): to eat or drink something; eat up

In due negative effects, many people have reduced the amount of red meat they consume.

Contradict (v): to say that the opposite of what someone has said is true; deny the truth of something said or written; challenge

She didn't dare contradict her parents and relatives.

Hazard (n): something that could be dangerous or cause damage or accident; risk

There must be protection from radiation hazards during pregnancy period.

Irrelevant (adj): not important or not relevant to what you are discussing or doing; unrelated; out of place; extraneous

What you said is irrelevant to the theory.

Logically (adv): connecting ideas and reasons in a sensible way; rational

He presented his ideas clearly and logically.

Manipulation (n): behavior that influences someone or controls something in a clever or dishonest way

Scientists are attempting, by genetic manipulation, to produce more effective drugs.

Prevent (v): to stop something from happening; to stop someone from doing something; restrain

Doctors' actions prevented several diseases from spreading.

Sound (adj): involving the use of good judgment, and therefore likely

to be effective; reliable
Psychiatrists should make sure the drugs are legally sound.
Typical (adj): like most things of the same type; representative or characteristic; classic; regular
The professor followed a typical teaching method in the classroom.
Willingness (n): ready to help, to do what is needed, asked, etc.; to show that you are willing to do something; readiness
Teacher was impressed by student willingness to listen and learn.

Key words
Concept (n): a mental category of objects or ideas based on properties they share; the internal, psychological, representation of the shared attributes
Some concepts like pen is regarded as highly concrete, easily identifiable, easily imaged and easily categorized.
Confirmation bias (n): the tendency to selectively attend to information that supports one's general beliefs while ignoring information or evidence that contradicts one's beliefs
Confirmation bias is the tendency to abandon logical rules in favour of our own personal beliefs.
Critical thinking (n): process by which one analyzes, evaluates, and forms ideas
The core traits of critical thinking are sound analysis, evaluation, and information of ideas based on the evidence at hand.
Daydreaming (n): mental fantasies while one is awake; imagining; fantasy
Some findings suggest that daydreaming is associated with mental health.
Deductive reasoning (n): reasoning from general statements of what is known to specific conclusions
In deductive reasoning, the specific conclusion is always true if the general statement is true.
Framing (n): the idea that the same information, problem or options

can be structured and presented in different ways
Framing influences how we perceive information and can interfere with logical reasoning.
Inductive reasoning (n): reasoning to general conclusions from specific evidence
When scientists develop theories, they employ inductive reasoning because they offer general statements that explain many specific facts or observations.
Premise (n): a principle or statement that you consider to be true, that you based other ideas and actions on; assumption
The conclusions in the report were based on a false premise.
Proposition (n): whatever can be expressed in the standard form of an indicative sentence; proposal; plan
This proposition is so clear that it needs no explanation.
Prototype (n): the most typical and familiar members of a category, or class; the original, primitive type or forms of a thing
The use of prototypes is perhaps the most elementary method of forming concepts.
Reasoning (n): the process of drawing inferences or conclusions from principles and evidence; proof
The reasoning behind this theory appears to be sound.
Remember (v): to recall, recollect or reproduce an earlier experience, event, stimulus, etc.; remind
The patient can still remember every experience of his life.

Thinking

Thinking is a general term that refers to all conscious mental activity, whether it is acquiring new knowledge, remembering, planning ahead, or daydreaming. We are still far from understanding exactly how the brain produces thought, it is clear that thought exists as patterns of

neural activity from a biological level of analysis. At the psychological level, thinking may seem to be internal language of the mind–somewhat like 'inner speech'–but it actually includes several mental activities. Thinking involves the manipulation of two forms of mental representations: propositions and concepts.

Much of our thinking occurs in the form of propositions, statements that express ideas. All propositions consist of concepts combined in a particular way. For example, 'university students are intelligent people' is a proposition in which the two concepts ' university students' and 'intelligent people' are linked by the verb are. Concepts are basic units of semantic memory–mental categories into which we place objects, activities, abstractions and events that have essential features in common. Every psychological term we are learning in this book is a concept.

Concepts can be acquired through explicit instruction or through our own observations of similarities and differences among various objects and events. Many concepts are difficult to define exactly. Is an eagle a bird? Is a penguin a bird? Is a bat a bird? According to the prototype view, the most typical and familiar members of a category or class, you should have come to a quicker decision on the first question than on the last to. Why? Because an eagle fits most people's 'bird' prototype better than does a penguin (which is a bird, though it lacks some essential prototypic features, such as the ability to fly) or a bat (which is not a bird, even though it flies).

One aspect of intelligent thinking is the ability to reason and think logically. Such thinking helps us acquire knowledge, make sound decisions and solve problems. Reasoning helps us avoid the hazards and time–consuming efforts of trail and error. Most of the time, people solve problems by developing solutions in their minds before applying them in the external world.

Deductive reasoning and inductive reasoning are two types of reasoning underlie many of our attempts to make decisions and solve problems. In deductive reasoning, we reason from the top down, that

is, from general principles to a conclusion about a specific case. When people deductively, they begin with a set of premises (propositions assumed to be true) and determine what the promises imply about a specific situation. Deductive reasoning is the basis of formal mathematics and logic. For example, if all humans are mortal (first premise), and if Socrates is a human (second premise), then Socrates must be mortal (conclusion).

However, in inductive reasoning, we reason from the bottom up, starting with specific facts and trying to develop a general principle. Scientists use induction when they discover general principles, or laws, as a result of observing a number of specific instances of phenomenon. After Ivan Pavlov observed repeatedly that the dogs in his laboratory began to salivate when approached by the experimenter who fed them, he began to think in terms of a general principle that eventually became the foundation of classical conditioning (repeated conditioned stimulus - unconditioned stimulus pairings produce a conditioned response).

An important difference between deductive and inductive reasoning lies in the certainty of the results. Deductive conclusions are certain to be true if the premises are true, but inductive reasoning leads to likelihood rather than certainty.

The ability to reason effectively is a key factor in critical thinking, in making sound decisions, and in solving problems. Unfortunately, several factors may prevent us from selecting the information needed to draw sound conclusions.

One of these factors is distraction by irrelevant information. People often fail to solve problems because they simply do not focus on the relevant information. Instead, they take into account irrelevant information that leads them astray. One of the other factors is confirmation bias. Confirmation bias is the tendency to selectively attend to information that support one's general beliefs while ignoring information or evidence that contradicts one's beliefs. Reasoning can be affected by the particular way that information is presented to us,

or 'framed'. Framing refers to the idea that the same information, problem or options can be structured and presented in different ways. For example, in one classic study, college students who were told that a cancer treatment had a 50 per cent success rate judged the treatment to be significantly more effective and expressed a greater willingness to have it administered to a family member than did participants who were told that the treatment had a 50 per cent failure rate.

In conclusion, thinking is a broad term that refers to how we use knowledge to analyze situations, solve problems, and make decisions. In next chapters we describe these cognitive abilities.

Understanding the Passage

Exercise 1.1

Choose the best choice a, b, c or d.

1. The passage explains ……. .
   a. remembering
   c. planning ahead
   b. process of thinking
   d. daydreaming
2. The word “foundation” is closest in meaning to ……. .
   a. the confirmation
   c. treatment
   b. the astray
   d. base
3. It can be inferred from the passage that reasoning leads us to the …. .
   a. propositions
   c. problem solving
   b. concepts
   d. the hazards
4. When we reason from general statements of what is known to specific conclusions, we are engaging in ……. .
   a. deductive reasoning
   c. inductive reasoning
   b. ignoring information
   d. classical conditioning
5. When scientists develop theories, they employ ……...…. because they offer general statements that explain many specific facts or observations.
   a. confirmation bias
   c. inductive reasoning
   b. prototypic features
   d. deductive reasoning

6. Which of the following would be considered a prototype for fruit?

a. kiwi c. tomato

b. carrot d. apple

7. One of the factors may prevent us from selecting the information needed to draw sound conclusions are ……. .

a. framing c. first premise

b. logic d. inductive reasoning

Vocabulary Exercises

Exercise 1.2

Match the terms in column A with their definitions in column B.

A	B
1. prototype	A. the process of drawing inferences or conclusions from principles and evidence
2. proposition	B. reasoning to general conclusions from specific evidence
3. daydreaming	C. process by which one analyzes, evaluates, and forms ideas
4. willingness	D. the most typical and familiar members of a category, or class
5. reasoning	E. reasoning from general statements of what is known to specific conclusions
6. hazard	F. to eat or drink something
7. prevent	G. whatever can be expressed in the standard form of an indicative sentence.
8.deductive reasoning	H. connecting ideas and reasons in a sensible way
9. astray	I. something that could be dangerous or cause damage or accident
10.inductive reasoning	J. to become lost or go to the wrong place
11. critical thinking	K. behavior that influences someone or controls something in a clever or dishonest way
12. consume	L. to stop something from happening; to stop someone from doing something
13. combine	M. if you combine things or they combine, you use, do, or put them together
	N. ready to help, to do what is needed or asked
	O. mental fantasies while one is awake

Exercise 1.3

Fill in the blanks: use the correct form of the words given to complete the sentences that follow. There are more words than needed.

remember, deductive reasoning, manipulation, prototypes, critical thinking, concepts, sound, daydreaming, classical conditioning, confirmation bias, sound, premise, ignoring information, inductive reasoning, propositions, prevent

1. Using ……. makes it easier to communicate with others and learn new information.
2. Counselor suggest patient that he leaves ……. and get back to work.
3. When scientists make specific predictions from their general theories, they are engaging in ……. .
4. Humans exhibit ……. , a tendency to look for facts to support hypotheses rather than to disprove it.
5. A (an) ……. decision needs to deep thinking and to be patient
6. The inquiry showed that ……. of students' ideas is necessary.
7. Some reasoning leads to a false conclusion because it is based on false ……. .
8. ……. is not a single skill, but rather a set of attitudes and thinking skills.
9. Conclusions drawn from inductive reasoning are less certain that those drawn from ……. .
10. Concepts can be combined into ……. to create simple and complex thoughts.
11. Regular face washing may help ……. eye infections.
12. Children's early concepts are based on ……. of the objects and people they encounter personally.
13. I ……. that I was really nervous on my first day at university.

Chapter Two

Creativity

General aims

This unit will enable students to acquire:

1. Students develop reading skills including skimming and scanning.
2. This chapter aims at raising students' general proficiency in English to a level appropriate for university study.

Behavioral objectives

The present lesson has two specific aims:

1. Define the meaning of the following general words:

brick, category, come off, elevator, entail, flexibility, fluency, focus, gauge, geometric, highlight, novel, obvious, offer, originality, possess, pronounced, quality, ride, sensitive, unconventional, unstable, unusual

2. Define the meaning of the following key words:

characteristic, creative thinking, creativity, emotionally, openness to experience, personality, self- confidence, trait, visual imagery

3. Translate this lesson (creativity) into Persian.