Cognitive Psychology
(16HS632)

Group Assignment

Group Members:

Patil Amit Gurusidhappa	19104004	B11
Sanjoli Goyal	19104007	B11
Muskan Jain	19104010	B11
Aniket Dubey	19104013	B11
Shashank Agarwal	19104018	B11

Submitted to:
Dr. Monali Bhattacharya

Table Of Contents

Perception: The Problem Is Not That Others Don't Get You. The Problem Is Perception Itself

Description

The term *"person perception"* refers to the different mental processes that we use to form impressions of other people or how our impression gets formed in front of others. This includes not just how we form these impressions, but the different conclusions we make about other people based on our impressions.

Consider how often you make this kind of judgment every day. When you meet with a new co-worker, you immediately begin to develop an initial impression of this person. When you visit the grocery store after work, you might conclude the cashier who checks you out, even though you know very little about them.

This allows us to make *snap judgments and decisions,* but it can also lead to biased or stereotyped perceptions of other people. Let's take a closer look at how person perception works and the impact it has on our day-to-day interactions with other people

How We Form Impressions

Obviously, person perception is a very subjective process that can be affected by many variables. Factors that can influence the impressions you form of other people include the characteristics of the person you are observing, the context of the situation, your traits, and your past experiences.

People often form impressions of others very quickly, with only minimal information. We frequently base our impressions on the roles and social norms we expect from people. For example, you might form an impression of a city bus driver based on how you would anticipate a person in that role to behave, considering individual personality characteristics only after you have formed this initial impression.

Physical cues can also play an important role. If you see a woman dressed in a professional-looking suit, you might immediately assume that she works in a formal setting, perhaps at a law firm or bank. The salience of the information we perceive is also important. Generally, we tend to focus on the most obvious points rather than noting background information.

Below is the set of principles that characterize this perceptual change.

Principle #1: There is no out there.

The most crucial thing to understand when we deal with outside experiences is that we don't respond to the world out there. We respond to our perception of the world. Perception is formed by beliefs, cultural norms, religious affiliation, genetic factors, life experience, a sense of right and wrong, and so much more.

All of these factors are processed by our brain, which based on its computational power and mental capacity, will give us an idea of the world outside of us.

So in simple words, the world is an idea. More specifically the world is your idea.

"No truth is more absolutely certain than that all that exists for knowledge and, therefore, this whole world, is only an object in relation to the subject, perception of a perceiver—in a word, idea. The world is an idea."

Principle #2: I am an active process.

A common fallacy when it comes to perception is that we usually act passively and not actively to the processes we experience.

We tend to victimize ourselves whenever people negatively interact with us:

"She made me feel so angry."

In reality (in me) I am the one doing the acting. I actively create my own experience. The power of self-reliance is that it gives you the ability to take action and act upon your problem. You change from the victim to the person in control. And control is probably one of the most powerful and desired states of the human mind.

Closure

"Perceptual change is a huge topic."

After experimenting with it for quite some time I came to understand that when others judge me, I am using my perception of them to judge myself. I also realized that what they were saying was just their perception of me, not me.

"I'm not what I think I'm, I'm not what you think I'm, I'm I'm what I think you think I'm"

I not only got the philosophy that I create in my world, but I had the experience, along with others. When these principles are infused with every sentence that comes out of your mouth, it becomes your reality before long.

Memory - Problem in recalling during the examination

Introduction to memory

Memory refers to the processes that are used to acquire, store, retain, and later retrieve information. Psychologists have broken memory into three stages:

1. **Encoding**: processing the information received from our senses and registering it in the form of chemical and physical stimuli. Information can be encoded visually, acoustically or semantically. Sometimes things are not properly encoded in memory in the first place, which leads to forgetting.
2. **Storage**: Storage involves the creation of a record of the encoded information. In storage, we maintain information over periods. The way we store information affects the way we retrieve it. There has been a significant amount of research regarding Short Term Memory (STM) and Long Term Memory (LTM).
3. **Retrieval:** Locating and retrieving information from our memory in response to some external or internal cue. Retrieval helps define STM and LTM clearly.

As discussed, evidence suggests the existence of 3 types of memory:

1. **Sensory memory**: The momentary persistence of visual or auditory impressions and their brief availability for further processing.
2. **Short-term memory**: Paying attention to sensory memories generates information in short-term memory. We "live" in STM, as it processes the sensory events that constitute the ongoing present. Hence it is also called active memory. Most of the information stored here will be kept for approximately 20 to 30 sec.
3. **Long-term memory**: Attending to information in short-term memory allows it to continue to the next stage of long-term memory. Information in the long-term store is envisioned as relatively permanent, even though it might be inaccessible because of interference of incoming information.

The problem, and why we forget

Forgetting is a common occurrence, and improving memory is desirable in the events of an interview or examination. One may forget due to a failure in any stage of memory:

1. *Interference* during encoding.
2. Failure to *store information* in STM or LTM.
3. Difficulty in *retrieval*.

Solutions to improve recalling

1. Rehearsing - Rehearsal helps maintain short term memories indefinitely through the use of internal repetition. The information may also be encoded beyond our STM.

To memorize for examinations, sticky notes on commonly viewed places like walls or phone wallpaper. Besides semantic encoding by repeatedly reading the notes, this also helps to visually encode the notes into the memory.

2. Chunking - Short term memory's capacity can be stretched somewhat by chunking. Miller put the idea forward of the magic number 7. He thought that short-term memory capacity was 5 to 9 items because it only had a certain number of slots in which items could be stored.

If we can "chunk" information together, e.g. by using *mnemonics*, we can store a lot more information in our short-term memory. Chunking cannot occur until our LTM has provided the meaning of these units. Thus, meaningful grouping and subgrouping of similar questions and topics of the examination will aid in their memorization.

3. Organizing: Organizing information can help aid retrieval. We can organize information in sequences (such as alphabetically, by size or by time). Rehearse notes in a particular order, e.g. in the order, the teacher taught in the classroom. Students can also memorize bullet points in the particular order they are listed. These points will encourage better retrieval of information during the examination.

Attention- The Influence Of Paying Attention In Classroom On Students' Academic Achievement In Terms Of Their Comprehension And Recall Ability

If a student doesn't consciously attend the lesson because of distractors in their environment, they will not remember the lesson. Thus, selective attention becomes a necessary component in learning instructional material.

Students' attention in the classroom and their academic achievement are two related variables, and they are reflected in students' comprehension and recall ability. However, most of the studies referred to comprehension and recall ability interchangeably and mainly used recall tasks to measure working memory capacity.

Almost all teachers ask their students to pay their full attention to the lessons being explained. Teachers claim that attending to their every word would help students get a better grasp of the lessons and ideas and that it would take them less time to revise what they have learned afterwards. Teachers normally tell their students this piece of information without knowing how valid it is, or whether it is true. As suggested by Dean (2006) "...teachers know intuitively that they need to harness attention for learning". However, such an idea can be explained from a psychological point of view. Braver and Barch (2002) and Gray, Chabris and Braver (2003) stated that attention plays a huge role in various cognitive operations, such as working memory, long term memory, comprehension and reasoning, and general fluid intelligence. Adding to that, attention has an important role in the learning process because it brings whatever information is being discussed to consciousness, and leads to conscious processing. It has been said that when paying attention to a certain object, people become conscious of the object's attributes, and as soon as attention is shifted to something else, the object "fades from consciousness".

Methods to improve the attention of students in the classroom:-

1. **Teachers**: Teachers need to take into consideration variations among their students; some can be attentive for a longer period than their other peers, and this is due to the differences in their attention spans. Also, some of them are more visual than others, so it would be helpful if teachers associated the new information with some pictures to facilitate the learning process, and make it easier for students to recall them when needed, especially in tests and quizzes.

2. **Students**: For students' best interest, it could be suggested that they pay their full attention in class since the results of this study have shown that students with higher GPAs are the ones who have better comprehension, recall ability and attention span. Paying attention in class facilitates the learning process for the students because the information will be processed effectively which makes their retrieval easier later. Making mind maps, tables, graphs and abbreviations for lists of words when revising for exams

makes it easier to remember the information because, as seen from the results of the recall ability task, high and low achievers' results in the recall ability task, which mainly depended on visual, were close and hardly any difference could be detected.

3. **Schools**: Schools may contribute to students' ability to pay attention in the classroom. For example, teachers and principals could make some weekly workshops to discuss the reasons behind students' inattention in the classroom and provide some solutions for each of the problems, and in fact, they can involve the parents of the students in this process because they are aware of their children's problems. They might consider the physical and psychological atmosphere in the classroom. The physical atmosphere is mainly concerned with the seating of the students in the classroom; individually, in pairs or groups. The psychological atmosphere includes both students' and teachers' feelings in the classroom, as well as their attitudes towards the subject on which they are working.

Conclusion

Attention is an important factor that contributes to learning because it facilitates information processing and has a huge impact on students' immediate responses in the classroom. There are many types of attention, such as sustained attention, selective attention, controlled attention, controlled attention, divided attention and spatial attention. Each of these types is required in different situations, depending on the types of tasks that teachers provide for students. There are also three subsystems of attention: alerting, orienting or selecting and executive control, which is considered to be important in clarifying the nature of the relationship between attention and comprehension. it is said that working memory capacity is related to students' learning, which depends on their comprehension, recall ability and attention span. If students' working memory can process the received information in class effectively, they will have a better understanding, and they will be able to retrieve the information effectively when needed because the process of learning has been facilitated by their attention. This will affect the academic performance of the students positively.

Imagery - Problem of Stage fright before an important presentation

Mental imagery is used to understand information and events that need to be remembered. By forming mental imagery, one can visualize themselves achieving success, solving problems and coping with problematic situations that may arise.
- helpful for artists and teachers to use to solve problems in work too

Process visual information even when it is not present~
- An artist may sometimes envision a work of art before starting to create it
- A teacher might review lessons in his/her mind before they teach the material to students in class

Mental imagery is very important to reason about problems and to perform better in situations that require physical or mental exercise, like preparing to give a presentation in front of a whole class (60-70) students for at least a few days
- Creating a mental image while doing so; also called **mentally preparing**
  Imagining the way you walk towards the stage, adjusting the mic, preparing to speak, the image of the moment where you introduce yourself, the audience sitting in the room, the lights on the stage, the glass of water on the podium, the paper with speech notes written on it, the presentation screen in the background, the way the audience reacts when I speak up the joke I mentioned in my speech, the silence of the class, the familiar faces of my friends looking towards me when I speak and applaud after the presentation ends and much more
- Doing this several times, as a thinking skill to perform better during the actual presentation
- Mental practice to perform in physical activity/task helps in calming nerves too

- We overcame the fear of giving a presentation in the class by visualizing mental images too
  using mental imagery to rid of fear
- Picture me near a comfortable stage, such as a happy audience and not too big or too small stage, **where the environment offers a calm sensation and is non-threatening**.

- Feeling physical anxiety signals like a raised heartbeat, and fidgeting during the presentation can also be coped up using imagery
- Forming images in your mind can help you link situations together to fashion a solution to your problem
- Imagining that you can speak louder when you feel your heartbeat raising can help you implement it in the actual scene too

- Speak louder to not hear your own raised heartbeat during the presentation

One would master the utilization of mental imagery by practicing it each day. You can do this by dealing with a series of problems that you are faced with during the week. Starting very simply with visualizing yourself in a particular situation.

Visualizing yourself speaking before every presentation can improve your performance, confidence, control, and mental awareness during the actual one.

For a longer, more intense visualization, a quiet space or room might be used to calm down and allow yourself to become accessible to what you want to visualize or accomplish.

Conclusion

Mastery in forming mental images and using them is a way of dealing with phobias, problematic situations, or physical tasks and events.

Language:- Problem in communication due to different linguistic backgrounds

Language accumulates cultural wisdom. Cognition develops mental representations modelling the surrounding world and adapts cultural knowledge to concrete circumstances of life. Language is acquired from surrounding language "ready-made" and therefore can be acquired early in life. This early acquisition of language in childhood encompasses the entire hierarchy from sounds to words, to phrases, and the highest concepts existing in culture.

Language is the symbolic behaviour that allowed human singularities—art, religion, and science—to occur. We use it to buy groceries in the supermarket, get a job, hire or fire an employee, buy train tickets, and compose an email. Language allows us to make friends and enemies, to pass the time of day, and so on. In our everyday lives, we produce and comprehend language with such apparent ease that we take it for granted.

No matter which communication channels we use, our biggest obstacle is the ability (or inability) to understand what others are saying. If someone's words don't make sense to you, every conversation, email, report, and memo will be unproductive. You won't be able to execute ideas well as a team because there isn't a clear agreement on what to do or how to do it. A **language barrier** is any linguistic limitation that creates confusion or prevents comprehension.

Types of language barriers:

1. Spoken languages and dialects of people speaking languages native to different regions. Dialects are another example of a language barrier. People can technically speak the same language and still face misunderstandings and gaps in communication due to dialectical difference
2. The technical language of your industry or skill set may involve a lot of jargon or technical language. When speaking to people outside your industry or even outside your department, a lot can get lost in translation
3. Language disabilities: stuttering, dysphonia, and hearing loss.

Overcoming language barriers

1. Use plain language: Whether you're working with someone whose native language is different or trying to explain a technical problem to non-technical co-workers, everyone should get in the habit of using plain language whenever possible.

2. Use visual methods of communication: Words often fail us, and when they do, showing can be a lot more effective than telling. Use pictures or diagrams to explain complicated concepts. Visual cues are invaluable for getting everyone on the same page, not to mention, thinking more creatively about new solutions.

3. Use repetition: Language barrier or not, people often need to hear something more than once to understand and remember it.

4. Be respectful: Talk slower instead of louder, clearly instead of forcefully. And remember, when someone is working through a language hurdle, it has nothing to do with their actual intelligence or ability to grasp the concept behind what you're trying to say.

References

1. Typetalk. 2022. *Overcoming language barriers to communication | Typetalk*. [online] Available at: <https://www.typetalk.com/blog/overcoming-language-barriers-communication/> [Accessed 7 May 2022].
2. Encyclopedia.uia.org. 2022. *Language as a barrier to communication | World Problems & Global Issues | The Encyclopedia of World Problems*. [online] Available at: <http://encyclopedia.uia.org/en/problem/137300> [Accessed 7 May 2022].
3. Psychology Today. 2022. *What Do We Use Language For?*. [online] Available at: <https://www.psychologytoday.com/us/blog/language-in-the-mind/201412/what-do-we-use-language> [Accessed 7 May 2022].
4. Benjamintellie.com. 2022. *Using mental imagery to solve problems » Benjamin Tellie*. [online] Available at: <https://www.benjamintellie.com/?p=3648> [Accessed 7 May 2022].
5. *The Influence of Paying Attention in Classroom on Students' Academic Achievement in Terms of Their Comprehension and Recall Ability*
6. Promote Selective Attention in 4th-Grade Students: Lessons Learned from a School-Based Intervention on Self-Regulation
7. Verywell Mind. 2022. *How Do We Form Impressions of Other People?*. [online] Available at: <https://www.verywellmind.com/person-perception-2795900> [Accessed 7 May 2022].
8. The-problem-is-your-perception<https://thequintessentialmind.com/the-problem-is-your-perception/> [Accessed 7 May 2022].
9. Conscious Discipline. 2022. *Seven Powers: Power of Perception*. [online] Available at: <https://consciousdiscipline.com/seven-powers-power-of-perception/> [Accessed 7 May 2022].
10. Pediaa.Com. 2022. *Difference Between Perception and Perspective | Definition, Meaning, Relationship*. [online] Available at: <https://pediaa.com/difference-between-perception-and-perspective/> [Accessed 7 May 2022].
11. The effortful educator, V., 2022. *Psychology in the Classroom #1 - Selective Attention - The Effortful Educator*. [online] The Effortful Educator. Available at: <https://theeffortfuleducator.com/2022/01/03/psychology-in-the-classroom-selective-attention/> [Accessed 7 May 2022].
12. McLeod, S. A. (2013, August 05). Stages of memory - encoding storage and retrieval. Simply Psychology. www.simplypsychology.org/memory.html
13. Courses.lumenlearning.com. 2022. *Introduction to Memory | Boundless Psychology*. [online] Available at: <https://courses.lumenlearning.com/boundless-psychology/chapter/introduction-to-memory/> [Accessed 7 May 2022].
14. Verywell Mind. 2022. *Take a Deeper Look Into Human Memory*. [online] Available at: <https://www.verywellmind.com/what-is-memory-2795006> [Accessed 7 May 2022].