

Relationship of Attention and Memory on Gender Differences.

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Annotation: the article reveals the relationship between attention and memory for gender differences according to the study, which partially confirmed the correctness of the hypothesis put forward. As a hypothesis of the study, it was suggested that there are no gender differences in attention and memory, but these differences do exist.

Keywords: psychological characteristics, differentiation, gender stereotypes, identification, limbic system, theta rhythm

Relevance of the study: The relationship between attention and memory in terms of gender differences is due to modern trends taking place in society, which re-evaluate and change social and gender stereotypes, which is reflected both in the general picture of the world and in the image of the future. Attention and memory in the study of the psychological characteristics of men and women is aimed at identifying patterns, mechanisms for the formation of gender differentiation; generalization, refinement of research methodology, study of the problems of the formation and functioning of gender stereotypes and their impact on gender identification.

Object of study: The theory of gender approach in the study of attention and memory.

Aims of the study: To investigate the differences and general characteristics of attention and memory in men and women, to identify the features of the principles of the brain responsible for attention and memory in a gender approach,

Research objectives:

1. Conduct a theoretical analysis of the study of the relationship between attention and memory on gender differences;
2. Conduct a theoretical analysis of foreign TI domestic research in determining the relationship between attention and memory for gender differences;
3. Identification of specific features

Research problem: Revealing psychological aspects gender approach differences in attention and memory. Gender differences are a set of specific psychological and physiological characteristics of men and women. This is the sexual behavior that determines the relationship with other people: friends, colleagues, classmates, parents, random passers-by, etc. (Dugin). Works and studies by B.G. Ananyeva, T.V. Bendas, E.P. Ilyina, A.G. Dugin, I.S. Kona, P. Bourdieu, E.P. Anisimova, I.S. Kletsina and others. There are a number of data on psychophysiological characteristics of men and women, among which the most significant are the differences in the field of physical activity.

Women perform less efficiently on visuospatial tasks compared to their male counterparts. However, women perform similar passive tasks that involve lower level thought processes such as complex mental images (Cattaneo, Postma, & Vecchi, 2006). For the most part, the differences did not seem significant enough to unequivocally establish them (Cattaneo, Postma, & Vecchi, 2006). There are not enough studies to establish significant differences in either direction (Silverman & Eals, 1992). It's safe to say that gender does affect memory, although exactly how it affects it needs further research. Cattaneo, Postma and Vecchi (2006) formulated their results for adults aged 20 to 37 years, so they cannot be applied to all age groups.

Interesting data have been obtained in recent years on the peculiarities of the perception of pain by men and women. In laboratory studies involving healthy volunteers, differences in the thresholds for perceiving pain stimuli were shown: women have lower thresholds, i.e. they have greater pain sensitivity. Many clinical observations show that girls and women often complain of pain in various diseases, their pain is more intense and longer than that of boys and men. Such differences in pain perception are often explained by biological

features, possible differences in the functioning of the nerve structures that transmit pain signals or affect their transmission.

Pain is complex multilevel psychophysiological phenomenon. In this regard, researchers pay attention to the participation of psychological and sociocultural factors in the perception and experience of pain (Ilyin, p. 235). It is emphasized that the cognitive and emotional components of experiencing pain are not the same in men and women. Women are more inclined to evaluate the sensation of pain as important, demonstrate greater alertness to pain, a willingness to complain about it, while men are reluctant to do so. To assess the factor of masculinity/femininity in the perception of "laboratory" pain by healthy subjects, the S. Behm Prenatal Questionnaire was used. It turned out that men who scored high in "masculinity" had a higher pain threshold than men with a low level of masculinity and women. In women, the degree of masculinity/femininity did not affect the perception of pain. These results confirm the significance of the influence of socio-psychological attitudes on the perception of pain. However, the role of these factors in clinical situations with severe pain is significantly reduced. In contrast to experimental studies, which usually study pain of mild or moderate intensity, in clinical cases with severe pain, differences between men and women in the perception and tolerance of pain are leveled.

Research materials:

Attention is a cognitive mental process, which is a selective focus of perception on a particular object. Behind the attention are always the interests and needs of the person.

Memory is a cognitive mental process of remembering, storing and subsequent reproduction of incoming information. This is a form of mental reflection, fixed by trace phenomena in the central nervous system, in response to external or internal influences on the body.

Types of memory: figurative, verbal-logical, sensory, eidetic, social and topographic.

According to scientists, the department responsible for attention and memory is the region of the brain called the hippocampus. That is, being a limbic system of the brain, it forms the transition of short-term memory to long-term memory, as well as the spatial memory necessary for navigation. Generates theta rhythm when holding attention.

Gender differences in attention and memory.

The first data on **gender differences in attention** were given by G. Geimans. He pointed to the worst distribution of attention among women, expressed in the fact that they cannot talk and do any work at the same time. True, there may be another reason for this- not in the inability to distribute attention, but in the unwillingness to distribute it due to excessive emotional involvement in the conversation. He also reports that women demonstrate subtle observation - but only in what interests them, and that women have a more rigorous selection of material when presented simultaneously. But the latter may also indicate not a lack of attention, but a different organization of it.

Men, while watching the conversation, scientists tracked the movements of the pupils of the participants in the experiment using a special camera. It turned out that the attention of men was more often focused on the lips of the subject, and they were distracted by the movement in the background, regardless of who made it. Memory is expressed in different forms and men also have benefits. Such males are more likely to find a way to their car, because they remember better spatial information.

Women, it is more common for them to stop looking at the eyes of the interviewee, and other people in the frame were distracting factors for them, which was associated with a greater tendency of carriers of the XX set of sex chromosomes to empathy. G. Geimans cites data that women have a better memory, but only in relation to what arouses their interest, so they may have problems remembering mathematical, grammatical rules, historical dates, etc. In addition, women associations of adjacency prevail over associations of similarity. Women remember specific details better than men. According to surveys, women have better developed episodic memory - about autobiographical events, including their specific time, place and emotional state associated with them. In other words, it is the ability to remember "what happened last week or whether the cat was fed this morning." Also, women have an increased "sensory memory", that is, they better remember faces or, for example, smells.

Experiments carried out (Thorndike method):

The Thorndike test is a widely used test among psychologists for determining the selectivity of attention, which is a table with 100 three-digit numbers placed randomly in a table of 10 by 10 cells, and ten random three-digit numbers that the subject must find and highlight in the table like this quickly as possible. In this case, the test is limited to five minutes, continuing to pass the test beyond this limit will no longer show more an objective result, in addition, if the subject searches for numbers for more than 5 minutes, this indicates the lowest score for passing, and, accordingly, a low level of selectivity of attention.

The main goal - to analyze and describe the results of students on the determination of **the selectivity of perceptual attention was carried out online test in Telegram.**

267 814 432 919 185 329 588 270 687 466

919	640	707	610	239	455	107	220	313	126
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
442	748	612	365	440	535	869	798	187	734
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
669	760	125	882	547	171	594	466	509	912
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
460	120	330	820	631	554	157	185	328	211
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
270	153	381	520	863	687	652	814	235	714
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
717	123	854	327	720	473	588	420	609	961
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Based on my experiment, the average score for women is 7 points, and for men 14 points, which corresponds to the average and high level of attentiveness. The time was 239 seconds and 120 seconds respectively (average value). From which it follows that males are more attentive than females. Unfortunately, the results of the female gender are very poor.

Research results among female students:

Residents	Score	Time	Level
Student1	8	223 sec	Medium
Student2	10	167 sec	Medium
Student3	6	301 sec	Low
Student4	2	305 sec	Low
Student5	4	303 sec	Low
Student6	15	159 sec	High
Student7	5	253 sec	Low
Student8	5	199 sec	Low

Research results among male students:

Residents	Score	Time	Level
Student1	18	128 sec	High
Student2	19	118 sec	High
Student3	6	308 sec	Low
Student4	10	206 sec	Medium
Student5	15	158 sec	High

Student6	15	158 sec	High
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Score	Time (sec)	Level
19	<119	III high
18	120-129	III high
17	130-139	III high
16	140-149	III high
15	150-159	III high
14	160-169	III high
13	170-179	II medium
12	180-189	II medium
11	190-199	II medium
10	200-209	II medium
9	210-219	II medium
8	220-229	II medium
7	230-239	II medium
6	240-249	I low
5	250-259	I low
4	260-269	I low
3	270-279	I low

Conclusions:

Research shows that gender also affects memory and attention, as evidenced by the observation that women are less efficient at visuospatial tasks compared to men.

Men are better at remembering and remembering everything related to mathematical data and spatial perception. In particular, men remember information with better accurate metric details about the location or location of an object. In business, spatial perception is one of the few memory subcategories that men perform better than women.

Thus, the clearest distinction between men and women are detected by psychomotor abilities, by spatial imagination and mathematical abilities (in favor of men), according to verbal abilities (in favor of women).

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