

A study on misjudgment behavior of inattentional blindness

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"Inattentional blindness" means when people particularly concern on certain objects in their range of vision would always neglects other stimulus inadvertently, and the more distracted by other things, the more to reduce the brain's response of external stimulus. This makes the phenomena of inattentional blindness even relatively obvious. When we ignore these phenomena, we also ignore the crisis it might bring. Therefore, the purpose of this study is to using a small problem which occur in our daily life as the starting point, hoping to arouse people's attention on the problem which might caused by inattentional blindness through the experiment of "buying drinks".

The experimental result shows that the total number of 5 stores didn't considered A and B as different person, so the rate of misjudgment rate up to 71.4%. This result has confirmed that the inattentional blindness phenomenon is indeed causes some problems in our daily life, especially in some place which need to deal with cash.

The "misjudgment behavior" happened in daily life frequently. Thus, we hope to remind people to pay more attention about the inattentional blindness problem and to build up the ability of observation as well as the good habits to reduce it.

Key words: Nattentional blindness, Misjudgment behavior

1. Purpose of research

We may have the experience which we focus on something in particular while ignoring other things which lead to a misjudgment on cognitive behavior, the consequences of misjudgment behavior can be nothing or serious. In fact, there are many similar cases hidden between us which may affect our personal safety. This study aimed to remind the public by the experimental of not pay attention to inattentional blindness. For example, if the driver focus on the sign too much, they might ignore the motorcycles around their car to people who walk on the street. In that case, it might cause the serious car accident. Therefore, this experiment would like to remind everyone and reduce the possibilities of accident which caused by the inattentional blindness.

2. Literature review

2.1 inattentional blindness

In the study of Rock, Linnett and Mack (1992), it use a new way to measure things which allow people could perceived without the need of attention to explore the unexpected stimulus, to see if people could notice some part of feature, color and shape, etc without the attention or not. In overall speaking, Rock found that about 25% of the participants ignored it. Also, they also exclude the possibility of short presentation and short stimulus, etc.

Therefore, the phenomenon is called inattentional blindness by Rock and others

2.2 Action research

Many scholars have different perspectives to the development model of action research. However, all the development model are all from the "spiraling cycle mode" which bring up by Lewin. To use Lewin's idea as the basic, consider action research is a process of spiral rise. Every spiral development circle contains four interconnected. The stage of implementations are as follow:

(1)Planning: Clearly map out the problem need to be solved or the current situation and use a large number of facts; should includes an overall study of the implementation of the plan and a specific action steps.

(2)Action: In accordance with the implementation plan with a flexible action process and every execution should contains the knowledge and decision of the actors.

(3)Observation: Doing data collection and observation of every process, result, background and quality of the actor. This stage has no specific research procedures and techniques so it's recommended to adopt different methods based on the quality of each case.

(4)Reflection: Summarize the current situation which observed to describe the process and result of circulation loop before making a judgment, then doing the analysis and interpretation of the phenomenon. After that, pointing out the inconsistencies between the plan and the result to form a basic assumption, and then plan for the next cycle loop. This study is mainly adopt the way of action research and follow the steps above to the experimental results which obtained.

3. Research methodology

3.1 Study participants

Subject : The clerks of seven beverage stores.

Experimenters : Tzu-Ting Chen (A) and Pei-Yi Sung (B) .Two people in total.



(Left) A: Tzu-Ting Chen

(Right) B: Pei-Yi Sung

Picture : Experimenters dressed in similar outfit.

3.2 Experimental materials and experimental design

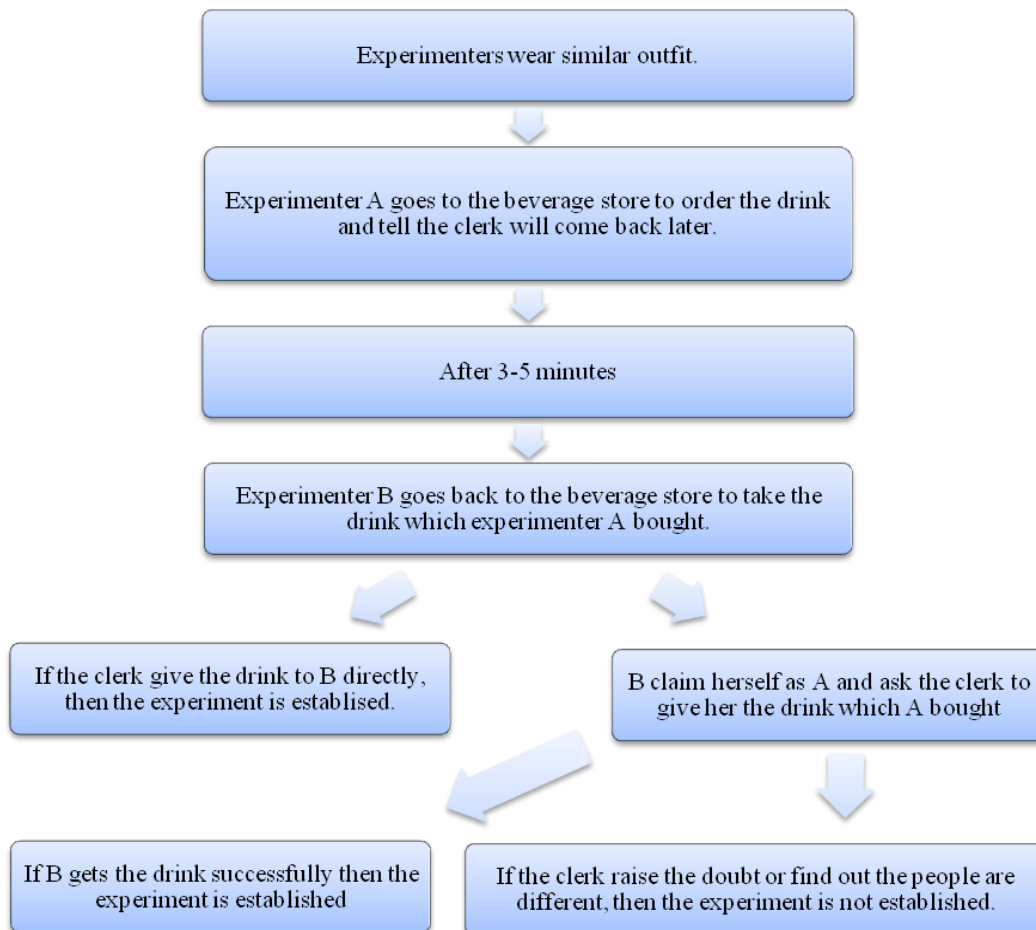
Location : Between Minsheng S. Rd. and Zhongshan Rd., Douliu City, Yunlin County, Taiwan.

Limit : It should be the same clerk who order and sent out the drink.

Experimental Procedure :

This experiment did not inform any related messages to the subjects in advance. At first, the experimenter A and B are wearing in similar outfit ,then the experimenter A goes to the beverage store to order the drink and tell the clerk will come back later (This process is record by B). After 3-5 minutes, experimenter B goes back to the beverage store to take the drink which experimenter A bought (This process is record by A) and observing the clerk whether gave the drink to B actively or not, if the clerk has no active behavior, experimenter B is going to pretend as A who order the drink few minutes ago and ask for the drink. On the contrary, if the clerk gave the drink to B without any questions, the experiment of "Inattention blindness" phenomenon is established.

3.3 The chart of the experimental procedure



3.4 The picture of experiment process

The test stores	Experimenters A	Experimenters B
50 Lan		
Ching Yu		
Prosetea		
Mi quan		



4. Result and conclusions

The test stores	Experimental process described
50 Lan	The clerk gave the drink to B immediately.
Ching Yu	The clerk gave the drink to B immediately.
Prosetea	B deemed to new guest , B pretend to A. After the clerk raised many questions, still not be convinced.
Mi quan	The clerk gave the drink to B immediately.
Share Tea	B deemed to new guests , B pretend to A , but the clerk directly identified A and B are different people
England Stornaway	Clerk did not respond at the start , B pretend to A, then the clerk gave the drink to B.
Mr. wish	The clerk gave the drink to B immediately.

Because the results of the Prosetea and Share Tea are different , so I conducted interviews with the clerk, ask the clerks about what they feel for two experimenters. (1) Prosetea : Because there was similar situation happened before so they'll pay special attention to remember the looks. (2) Share Tea : The clerk has paid attention to the

facial features while ordering so the clerk could tell the difference between two experimenters.

The experimental result shows that five beverage stores in a total of seven didn't noticed that A and B are different people so the misjudgment rate up to 71.4%. There were four stores gave the drink directly because they have the problem of inattentional blindness and considered A and B is the same, which means this is a problem that the majority of people are often ignored. Besides, most of the stores must pay right after order; therefore, due to the misjudgment of inattentional blindness would be a loss to the store as well and the consumers have to waste extra time in waiting. This experiment also found that if there were more people waiting, it's more likely to cause inattentional blindness phenomenon. The inconvenience which inattentional blindness phenomenon brought to life sometimes just nothing, but sometimes it indeed cause troubles to people. Thus, hoping the public could be aware of this phenomenon and make an improvement.

5. References

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