Threat and Unusualness as the Primary Influence on the “Weapon Focus Effect” in College Students: Whether or Not Culture Has Altered Our Perception.

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ABSTRACT

Using a weapon (i.e. gun), an unusual item (i.e. grass trimmer), and a control item (i.e. cell phone), an experiment was conducted to evaluate the research question: Does the weapon focus effect still have the potential to disrupt the scope of a college student’s attention capacity in regards to novelty as it has had on similar populations in past research? The weapon focus effect is the impulse action that a witness can experience during an armed crime where their concentration is solely on the weapon in use instead of other, more pertinent information. A thoroughly developed research design involving 139 college students from Metropolitan State University of Denver was created where three groups made up three separate picture viewing conditions: a man holding a gun, a grass trimmer, and a cell phone. A memory recall questionnaire was given post viewing. A between subjects one-way ANOVA was conducted and a significance was found in the group that viewed the weapon as well as the group that viewed the unusual item. These results are concurrent with previous research that has found attention and recall lacking when a weapon or unusual item was present suggesting that the weapon focus effect can be found in both threatening and unusual situations, contextually speaking.

Introduction

Weapons are often associated with threat, violence and crime so it would make sense that some of the first successful research conducted on this phenomenon revolved around the threat of the item being held (Lofthus et al., 1987; Maas & Köhnken, 1989; Saunders, 2009). Since arousal was not proving to be the culprit in our cognitive distraction researchers moved forward creatively and successfully proved that it is the unusualness of the item being held in regards to the environment it is being seen in (Pickel, 1989; Pickel 1999; Pickel et al., 2010; Hope & Wright, 2007). This phenomenon has been tested on adults, college students and children alike, and have been found to have comparable results (Davies et al., 2008; Pickel et al., 2008). College students, however, are among the oldest research conducted and the vast increase in violent material being seen (Madan et al., 2014) results might be different.

METHODS AND MATERIALS

Participants

139 Introductory Psychology students (n = 139)

Materials

3 photos. A man holding a gun, a grass trimmer, and a cell phone.

A 25 question memory recall test

Procedure

• Viewed one of the three picture for 5 seconds.
• After 5 seconds a memory recall test was handed out.

RESULTS

A one-way between subjects ANOVA was conducted to compare the effect of an item being held on memory recall in the weapon (i.e. gun), unusual item (i.e. grass trimmer), and control (i.e. cell phone) conditions. Mean numbers of items recalled are shown in Figure 1 above. The results were examined according to correct items recalled (1-24) on a memory recall test. A significance was found between the scenario being viewed by the participants and the description of central and peripheral environmental details (F(2,136) = 40.53, p < .05), with central and peripheral details being reported with more accuracy in the control condition (M = 15.04, SD = 3.50) than in the weapon (M = 10.44, SD = 2.30) or unusual item (M = 10.24, SD = 2.84) condition.

CONCLUSIONS

Results show that my hypothesis was supported.

Participants experienced the weapon focus effect in both the weapon and unusual item conditions. They recalled less correct information on the memory recall test. Exposure to a weapon or an unusual item that is out of context in regards to the situation it is viewed in motivated the participant to pay more of their focus and attention to the item being held rather than the central and peripheral environmental details that surrounded them.

When comparing these college student participants to past research involving college students, children and adults the same reaction is present.

Limitations

The item being held in the control group. The cell phone that the man was holding could have changed to a man holding nothing. A cell phone, even though not seen as a threat, can still pull focus, especially given our current culture.

Future research

• There is no research to date that has focused solely on adolescents.
• Study across colleges, even states.
• Implement a video rather than pictures.

REFERENCES


Scheff p < .05. Allusions to similar influences of pictures: Threat, negativity, or anxiety? Journal of Embryology, 1, 55-66.