

# **INSTITUTIONAL REVIEW BOARD**

# **PROJECT INFORMATION SUMMARY**

1. Title of Proposed Project: Vehicle styling influence on driving safety

## 2. Principal Investigator

Name: Alan Hoback

Department: Civil Engineering

Work Telephone:313-993-1578

Home Address Street Number:19248 Herrick

City, State Zip: Allen Park, MI 48101

Home Telephone:313-386-5821

- 3. Name of Associate Investigator(s): NA
- 4. Thesis/Dissertation or Faculty Advisor: NA
- 5. Dates of Entire Project Period: (From) <u>3/17</u> (To) <u>3/18</u>

## 6. Amount of Funding and Source Thereof: NA

**7.** "I/We agree to conform with all policies of the University of Detroit Mercy Institutional Review Board; to make no change affecting the rights of human subject volunteers without prior approval of the Board; when requested to do so, report to the Board on the progress of the research.

|   | Signature  | Date          |
|---|------------|---------------|
| Principle                               |            |               |
| Investigator                            | alon Hobed | <br>_2/25/17_ |
| Associate<br>Investigator(s):           |            | <br>          |
|   |            |               |
| Thesis/Dissertation or Faculty Advisor: |            |               |

**NOTE:** Changes in Federal mandates pertaining to research involving human subjects necessitate special care in completing these forms, especially the Informed Consent Form.

1. Objectives of Proposed Project: Long-term: Determine whether vehicle styling influences driving behaviors.

#### Short-term:

Part 1:

Determine:

- How easily people see faces in a car's design
- How commonly they see the car's "facial expression" as angry.
- Determine if there are relationships in responses to demographics of age, gender, and car driven, and how they say they respond to angry drivers.

Part 2:

Determine:

- Which automakers have vehicles that are styled to look "angriest?"
- What models of vehicles look "angriest?"

2. Brief Description of Research Plan:

1) Provide <u>Research Information Sheet</u> to potential participants and answer questions about the purpose of the study. (Sheet will have link to the study's web page.)

2) Confirm the potential participant is eligible age. (not a child)

3) Provide the form to the participant.

4) Debrief: See if they have follow up questions.

3. Listing of number of volunteers involved and the type of volunteer (age, sex, disease entity, etc.), and describe how the volunteers were recruited (see *Advertising for Study Volunteers* handout):

Number: Up to 200. Up to 100 participants for each Part. However, if statistically significant results are available earlier, then the study of that Part will be ceased. Type:

Age: Mostly college students, but eligible to anyone over 18 years. Sex: Open.

Disease, etc.: NA

**Recruited:** 

The student research assistant will collect data in UDM buildings, and any public place people gather such as church. The PI/Professor will not be involved in recruitment.

4. Listing of possible benefits which might accrue to the volunteers, or to others, as a result of their participation in the project:

Aggressive driving may be a factor in 56% of road deaths in the US. (Sebastian, and Flemons, 1981)

People see faces in inanimate objects. The phenomena is known as pareidolia. (Murra, and Di Lazzaro, 2010) It is unknown if seeing an angry car face behind them alters driving patterns.

The volunteers may become more aware of their own ways of thinking about vehicle style and how it could impact their driving behavior. Therefore, they may be able to react more appropriately while driving.

Others may benefit if the data supports a link between behavior and styling. The results of the study may change driving behavior, or may change the preferred styling of vehicles.

5. Listing of possible risks to the volunteers which might occur as a result of the volunteers participation in the project:

The survey form will ask for each car: "Do you think this looks like a face? / Do you think it looks like an angry expression?" The photos of cars are all on the road, so the risk is no greater than looking at cars on the road. It is unlikely that anyone will become upset by the poll question, but if they do, they will be reminded that they can decline to participate at any time.

6. Listing of all invasive procedures to be performed on the volunteer: None.

7. Listing of all medications, or chemical materials, and all appliances and devices, which will be in direct contact with the volunteer in the course of this study: None.

8. List all physical and/or medical tests to be performed on the volunteer. None.

9. List all questionnaires to be answered as a part of this research (attach a copy of each):

"Vehicle Styling Survey" Part 1 or Part 2. (See attached.)

There could be up to 4 versions of Part 2 because of the large number of vehicles and we don't want to burden the volunteer. However, if someone wants to, they may fill out all versions of the forms.

10. Describe how volunteers will be informed of possible benefits and/or risks (attach copy of Informed Consent Form):

A Research Information Sheet will be provided to all potential volunteers. (See attached.)

- Explanation of the study •
- Link to web site for viewing results http://hobackas.faculty.udmercy.edu/driving/index.html
- Statements about their participation and possibility to decline the survey.

A waiver of documentation of consent is requested. This is a short survey with minimal risk. No other personal information is kept besides age, gender and vehicle driven.

11. Describe how the confidentiality of the volunteers will be protected: No names will be collected. Only general demographic information about age and gender are collected.

12. Is a full copy (not merely a tentative draft) of the Informed Consent Form (including a signature page) included here? If not, indicate why: An informed consent form is not necessary for short surveys with minimal risk. Revised 6/11/07

13. Other information investigator deems appropriate (e.g. description of monetary or other incentives planned. When volunteers are paid for their participation, the payment should accrue as the study progresses and not be contingent upon completion of the study).

No payments. The form should take 2-3 minutes.

#### **References:**

Sebastian, A. A., and D. M. Flemons. *NHTSA's Fatal Accident Reporting System*. No. HS-032 797. 1981.

Murra, Daniele, and Paolo Di Lazzaro. "Sight and brain: an introduction to the visually misleading images." *International Workshop on the Scientific Approach to the Acheiropoietos Images, conference at ENEA, Frascati, Italy.* 2010.