## **UNIVERSITI TEKNOLOGI MARA**

# DETERMINATION OF FACTOR INFLUENCING MAN'S FACIAL ATTRACTIVENESS CONSIDERED AS MR RIGHT: A 2<sup>K</sup> FACTORIAL DESIGN APPROACH

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#### dissertation submitted in partial fulfillment of the requirements for the degree of Master of Science (Applied Statistics)

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July 2014

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### **AUTHOR'S DECLARATION**

I declare that the work in this dissertation was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

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Dissertation Title	:	Modelling For Determination of Factor Influencing Man's Facial Attractiveness Considered as Mr. Right: A Case Study in Uitm Shah Alam
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#### ABSTRACT

They are several causes of women delaying marriage such as education, job opportunities, financial problem and others. However, the highest percentage of reason women delaying marriage is no suitable candidates. Interestingly, the percentages of unmarried men compared to women are much higher. This phenomenon is relevant to understand whether men are not physically attractive. This study aimed to determine which characteristic of man's facial characteristic that women considered as Mr Right and the interaction effect of man's facial characteristic that women are attracted. In addition, this study is also interested to compare whether non-science and science student have different preferences towards man face and identify the best model to determine man's facial attractiveness for both non-science and science student. This study has been designed and analysed using  $2^k$  factorial design. By using picture-based as an instrument, 320 observations were collected for each group among UiTM student. Forty selected women were given 16 different pictures of men's face to rate the attractiveness of men's face. Each pictures having different characteristic or factors suggested by factorial design using design matrix. There are four factors used which are beard, hair, skin colour and glasses. Factorial analysis is used to examine which factors are influencing the attractiveness of man face. It is found that beard, hair and glasses are significantly attractive to the nonscience students. The significant two combination factors are beard and hair; beard and skin colour; hair and skin colour; hair and glasses. The three combinations factors significantly attractive are beard, hair and glasses; beard, skin colour and glasses; and hair, skin colour and glasses. Likewise, science student feels that all four main factors which are beard, hair, skin colour and glasses are important factor in determine facial attractiveness. The two combination factors shows that only two pairs are significant which are beard and glasses; hair and glasses. There are no three combination factors significant to the model. However, the four combination factor is important in determining man's facial attractiveness. Result of the analysis shows that different background of study have different preferences towards man's face.

#### ACKNOWLEDGEMENTS

Praise to ALLAH S.W.T, for his wisdom, strength and blessings in accomplishing this study. This endeavor would not be successful without ALLAH S.W.T who guides us in our everyday life and activities. Alhamdullilah, for the good health that has given.

First and foremost, my special appreciation goes to my respectable academic advisor, Assoc. Prof. Dr. Nor Azura Md Ghani, for giving me the opportunity to work on this interesting research study. The supports that she gave truly help in the progression and smoothness of this project. Indeed, she also guides me with the great analytical skills, advice and guidance in the completion of this dissertation.

Great deals appreciated go to Universiti Teknologi Mara (UiTM) facilities for enabling me to access the literature and conducting my dissertation. Sincere thanks to all my friends for their kindness and moral support during the completion of this dissertation.

Finally, the gratitude and thank stretch to my beloved family: my parents Idris bin Mat Ali and Noraini binti Marfai for their encouragement and never ending support. Their support during these few months in completing of this study is greatly appreciated.

Last but not least, to other people whose name is not mention, who were directly and indirectly involved in the completion of this study. My pray for blessings from ALLAH S.W.T. for all your commitments and assistance towards making this study a success. May ALLAH S.W.T. bless all of us with His mercy and compassion, here and hereafter. *Insha Allah*.