Are You a Mac or a PC?

Relationships Between Personality, Computer Stereotypes and Preference

Melissa Bagley, Stephanie Moulton, Evan Rubin, Deborah Ward

Abstract

- The goal of this study was to determine if there is any truth behind popular media stereotypes of Mac and PC users. 40 participants were given two surveys, a short form of a Five Factor personality test and a questionnaire about computer use and habits. It was hypothesized that 1) there would be positive correlations between use of Mac computers and the "Big Five" traits of extraversion and openness, 2) there would be positive correlations between use of PC computers and the "Big Five" traits of conscientiousness and neuroticism, 3) these correlations would be strongest between the traits and identification with a computer type, and 4) these personality traits would have predictive value for preference of computer type and identification with computer type but not ownership of computer type. Results indicated that extraverted individuals do prefer to use Mac computers and that the trait of extraversion is predictive of a preference for Mac computers.

Introduction

- Personality is defined as a person's organized set of characteristics that uniquely influences his or her cognitions, motivations, and behaviors in various situations (Ryckman, 2004)

  - This study measures participants personality according to the Five Factor Theory. This theory states that each person's personality is made of their varying levels of 5 basic personality traits (openness, conscientiousness, extraversion, agreeableness and neuroticism).

- Personality influences a person's buying behavior (Wang & Yang, 2008)

- Contemporary advertisements direct their marketing campaigns to certain personalities – companies market their products as being for specific types of people
  - For example, Mac uses the "cool," "witty," "extraverted" actor – Justin Long – to sell their product (Apple, 2006)

- Are there really personality differences between types of computer users? Is directing advertisements to certain types of personalities beneficial for companies?

- The present study is an exploratory study which takes information from popular culture and communications research and applies to it a psychological lens. Little psychologically based research on personality differences between consumers of different products has been completed.

Who are Mac and PC People?

- According to the media...

- Mac people" enjoy simplicity and aesthetic designs, they perceive themselves as unique, 'verbal', 'conceptual', 'risk-takers' (Hunch Inc., 2009)

- "Mac people" are considered to be more liberal and more open (PC World, 2008)

- "PC people" like subtle designs and enjoy practicality and sensibility; they indentify themselves as 'number-oriented', 'factual', and 'steady hard workers' (Hunch Inc., 2009)

- "PC people" are considered to be mainstream and prefer options that are safe and well-known (Hunch Inc., 2009)

Hypotheses

- H1: Mac users will have higher levels of the Big Five Traits extraversion and openness

- H2: PC users will have higher levels of the Big Five Traits neuroticism and conscientiousness

- H3: Correlations will be strongest between level of trait and identification with type of computer

- H4: Traits will hold predictive value for type of computer preferred and identified with

Methods

- Participants
  - 40 students (8 men, 32 women) enrolled in Advanced Lab and Research Methods classes
  - Age range: 19-22 years old
  - 57.5% owned PC's ; 42.5% owned Macs
- Materials
  - Modified version of the "Ten Item Personality Inventory" (TIPI)
  - Partially self-designed computer information survey
- Procedure
  - After signing an informed consent, participants over the age of 18 completed the two surveys. They were then given a debriefing.

Sample Questions

- Ten Item Personality Inventory
  - Short, modified form of the "Five Factor" personality scale
  - Participants rated the extent to which they agreed a pair of adjectives (ex. extraverted, enthusiastic; disorganized, careless) described them using a 6pt Likert scale with 1 meaning 'disagree strongly' and 6 meaning 'agree strongly'

Sample Questions

- Computer Survey
  - Included self-created questions and questions from Marchesini's "Computer Information Sheet" (1992, p. 50-51)
  - Some questions answered using the same 6pt Likert scale as the TIPI
  - Ex. How many hours a day do you use a Mac?
    - To what extent did the following influence your decision in purchasing your current computer? (Advertisements, family, professional reviews, workplace, etc)
    - Would you classify yourself as a Mac or PC person? Why?

Results

- Higher amounts of extraversion were significantly correlated with preference for Mac computers ($r = .31$, $p = .05$)

- Having a higher amount of extraversion predicted a preference for Mac computers (Beta $= .45$, $t = 2.30$, $p = .03$)

- Higher amounts of extraversion were significantly correlated with higher amounts of openness ($r = .50$, $p < .01$)

- Higher amounts of extraversion were almost significantly correlated with classification as a "Mac person" ($r = .30$, $p = .08$)

Correlations Between Traits and Computer Habits

	1	2	3	4	5	6	7	8
1. Prefer	--	.81**	.79**	.31*	.05	-.10	.04	.02
2. Own		--	.79**	.26	.16	.10	.20	.16
3. Classify			--	.30	.15	.11	.20	.06
4. Extravert				--	.500**	.06	.20	-.09
5. Open					--	-.20	-.03	.16
6. Conscientious						--	.33*	.06
7. Agreeable							--	-.02
8. Neurotic								--

Note: **Correlation is significant at the .01 level; * Correlation is significant at the .05 level
For the purposes of coding, PCs were listed as "1" and Macs were listed as "2."

Frequencies of Computer Preference, Classification and Possession

	Prefer	Classify	Own
PC	47.5%	50.0%	57.5%
Mac	50.0%	42.5%	42.5%
No Response	2.5%	7.5%	--

- These differing percentages suggest that subjects do not necessarily agree that the computer they own, prefer to use, and identify with is one and the same.
- Subjects who report a stronger preference for Mac computers also report having been strongly influenced by advertisements when deciding what type of computer to purchase ($r = .53, p < .01$)

Discussion

- Hypothesis 1 predicted Mac users would score higher in the traits of extraversion and openness, results partially supported this.

- No evidence supporting Hypothesis 2, which stated PC users would score higher in the traits of neuroticism and conscientiousness, was found.

- Results did not support Hypothesis 3, significant correlations were only found between extraversion and preference of computer.
  - However, the correlation between extraversion and type of computer a participant classified themselves as was almost significant ($r = .30$, $p = .08$) and, perhaps with more participants, could have been.

- Hypothesis 4 was partially supported, regression analyses found that the trait of extraversion was a significant predictor of preference for (but not identification with) Mac computers, Beta = .45, $t = 2.30$, $p = .03$

- Only significant correlation and prediction found between extraversion and computer *preference*.
- Indicates that it is the actual structure and how to operate the computer that relates to being extraverted.
  - Extraverts need more stimulation to become aroused and, consequently, seek out more excitement (McClure & Nylund, 2006, p 15)
  - According to the popular media advertisements, Macs are much more artistic and exciting and have more features than PCs.
- Conscientious people are characterized as being self-disciplined, acting dutifully and aiming for achievement.
  - For truly conscientious people, it probably doesn't matter what type of computer is used for them to achieve.
- Neuroticism actually refers to emotional instability but the word is used colloquially to describe someone who is "anal retentive" and a perfectionist.
  - More similar to the trait of conscientiousness than actual neuroticism.

Possible Benefits/Concerns

- Benefits for this study can be seen in the realm of marketing and in home use
  - If extraverts prefer to use Mac computers, Apple may want to make their ads more exciting to attract the attention of those extraverts
  - It is possible that knowing and using which operating system fits a person's trait best could maximize that person's work output

- An initial concern was that subjects would be so aware of the stereotypes of Mac and PC users from everyday media that participant expectancies and reactions would come into play.
- Future research should focus on a larger, more varied and diverse sample. It should consider using a more comprehensive measure of personality as well.

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