SF **Study Finds**

JillWellington / pixabay.com

January 3, 2021
Psychological, Society & Culture

Extraverts more likely to use words like 'love' or 'happy' — and retailers have taken notice

by Study Finds

f Share　　　　**🐦 Tweet**

SINGAPORE — We all know those happy-go-lucky people that always seem to have a smile on their face. Now, a study finds extraverts have a language all their own too. Researchers from Nanyang Technological University in Singapore say extroverts are more likely to use words that describe a pleasant emotional state like love or happy. It may sound obvious, but that information may mean big business for retailers.

emotion words" and "social process words." Psychologists define positive emotion words as words that describe a pleasant emotional state, such as love, happy, or blessed, or that indicate positivity or optimism, such as beautiful or nice. Social process words include words containing personal pronouns except 'I', and words showing social intentions, such as meet, share, and talk.

"This is the first time a relationship has been established between extraverts and their tendency to use the two categories of words," says principal investigator Lin Qiu from NTU Singapore in a university release.

"As it is a small correlation, we believe that stronger linguistic indicators are needed to improve machine learning approaches, amid rising interest in such tools in consumer marketing."

What extraverts say can mean big money for retailers

Dr. Qiu adds the findings highlight the need for stronger linguistic indicators to be developed for use in online personality prediction tools. These are tools being rapidly adopted by firms to improve their digital marketing strategies.

The associate professor explains that marketing companies use predictive algorithms to help them forecast what consumers want based on their online behavior. Companies are also keen to leverage data and machine learning to understand the psychological aspects of consumer behavior, which cannot be observed directly, but can provide valuable insights about how to improve targeted advertising.

Dr. Qiu suggests an extrovert consumer might be attracted to marketing messages that match their personality. Retail brands could then choose to target such shoppers by using more extroverted and creative language in their advertising. However, study authors caution that personality prediction tools available today are not entirely accurate due to a lack of theoretically sound designs.

"Current machine learning algorithms for personality prediction can seem like a black box – there are many linguistic indicators that can be included in their design, but many of them are dependent on the type of computer application used," Dr. Qiu explains. "This may lead to biases and overfitting, an error affecting the performance of the

machine learning algorithms. This begs the question – how should we create robust and accurate personality predictions?"

Perfecting the language of positivity

The findings, published in the *Journal of Research in Personality*, may provide marketers with well-founded linguistic predictors for the design of machine learning algorithms, improving the performance of software tools for personality prediction.

Previous individual studies reviewed by the NTU team reveal that extraversion, or the general tendency to experience positive emotions and enjoy social interactions, is related to the use of positive emotion or social process words. However, the strength of the relationship has varied substantially between the different studies exploring it.

To establish the effectiveness of such linguistic predictors, the NTU team reviewed 37 studies looking at the same topic to conduct a meta-analysis. Researchers determined the level of extraversion using internationally recognized personality questionnaires. Now, the research team plans to investigate the relationship between extraversion and other word categories.

Dr. Qiu says while machine learning and predictive analytics can provide companies and marketers with an added advantage in their business strategies, more thought must be put into the design of such analytical models.

The team hope their work will provide clarity on the types of words that can help guide the development of more accurate machine learning tools for personality prediction.

SWNS writer Stephen Beech contributed to this report.