

PSYC1000A Group 12: Proposal for encouraging using double-sided printing

consequences". As a green and beautiful forest is usually associated with the feeling of hopeful, the photo of a greener forest acts as a secondary positive reinforcement that it raises people's pleasant feelings and increases the likelihood for them to choose double-sided printing. On the contrary, deforestation is usually associated with the feeling of hopeless, the photo of deforestation acts as a positive punishment that it raises people's unpleasant feelings and decreases the likelihood for them to choose double-sided printing.

2) Optimally arousal model of curiosity

To achieve the effect of operant conditioning, most importantly, we need to ensure that people will watch the photo, which alter their decision. In our plan, background picture of the button will be changed every week so as to catch people's attention. If the environment is boring and lacks exciting stimuli, exploratory behavior will be engaged until something optimally arousing is encountered, that is the brain is searching for the perfect balance of arousal states (Litman, J. A. , 2005). So we are making the photo optimally arousing to catch people's attention and produce the effect of operant conditioning.

Principle behind showing the accumulated number of double-sided printing of the day:

Conformity

In order to shape double-sided printing behavior, we are also going to apply conformity in our plan. In general, conformity means following the majority. By showing the accumulated amount of people using double-sided printing, it is expected that people will conform to the

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majority and use double-sided printing.

Robert Cialdini (2005) proved the effectiveness of conformity in a study. He randomly assigned cards with different messages to 260 hotel lodgers, in order to encourage the lodgers to reuse wet towels. The message “Join your fellow citizens in helping to save the environment” is found to be the most effective among five, because it describes a social norm. Based on this study, we can know that it is effective to influence one’s behavior by saying “Everybody is doing it”. Therefore, we propose to encourage people to use double-sided printing by showing them the accumulated frequency of people using double-sided printing. Since showing a too small frequency reduces the significance of conformity, we will show people the yesterday figure if the accumulated frequency is smaller than one thousand.

Feasibility of the plan

One of the obstacles of the plan is programs in printers. We sought help from engine-major students and asked for the feasibility of writing those programs. The feedbacks are positive. Those programs can be written in a few weeks after sets of trials and installation in the printers. However, we have to consider the original program in printers and make sure that new programs can be overwritten to those branded printers without copyright concern.

Another obstacle is that we have to seek permission from libraries in the Chinese University of Hong Kong for installing the new printing interface in their printers. We have to firstly write the program for the project before seeking permission. The program has to be examined by the IT Department of the Chinese University of Hong Kong. We will draft a proposal to

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libraries after successfully writing the program with the help from engine-major students.

References:

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Litman, J. A. (2005). *Curiosity and the pleasures of learning: Wanting and liking new*

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Skinner, B. F.(1950) "*Are theories of learning necessary?*" *Psychological Review*,57,

193-216.

Relevance 3.25

Creativity 3

Feasibility 4

Impact 4.25

Total 14.5

Appendix

Simulation

<http://www.powtoon.com/p/dKoYVctbN8J/>



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Timetable

Hand in the proposal to ITSC department of CUHK	1/5/2014
Approval from ITSC	30/5/2014
Program written by engine-major students	1/6/2014

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Trials	10/6/2014
Program sent to ITSC for test and approval	1/7/2014
Installation of the program to all library printers in CUHK	25/8/2014
Test period	1/9/2014-14/9/2014
Start using	15/9/2014

Possible Outcomes

The ultimate outcome of the project is to encourage users to print documents in double-sided format instead of single-sided format in the Chinese University of Hong Kong. As we know that many users still print their documents in single-sided format in libraries, we hope that this project will increase their sense of environmental protection. Printing documents of double-sided format instead of single-sided format saves half of the paper, as well as trees, which is greener and more preferable.

Although printers in universities have default settings which remind users to print in double-sided format, we believe that some users may still print their printings in single-sided format. The project helps by the application of the theory of operant conditioning when they move the cursor onto the 'single-sided printing' button. Therefore, the project can still

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achieve the goal which is encouraging them to print in double-sided format despite default settings in printers.

We are looking forward to the possible outcomes of the project. We hope that at the end of the project, every user would prefer double-sided printing rather than single-sided printing.

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