

Free the psychology of habits and the incentive system literature review sample

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Introduction:

My literature review is on the concept of psychology of making and breaking habits and using incentives to get people to change their habits or start new ones. There has been a lot of study and research in the last decade over this topic. Charles Duhigg wrote one of the most revolutionizing books on this topic. The Power of Habit provided a psychological perspective on habits. The Power of Habit is one of the most powerful books ever written on habit formation and reformation. Several studies have also been undertaken to understand the effects of incentives on habit formation. Over the course of this paper, it is my attempt to detail the research and to understand whether it is actually possible to change our old habit patterns and if incentives help speed up the process.

What is a Habit?

Oxford defines a habit as “ A settled or regular tendency or practice, especially one that is hard to give up” This definition gives us quite a good idea of what a habit is. It is a regular practice that is hard to give up. Habits are the way we live our lives. Whether formed subconsciously or consciously, they affect our days, years and our entire life. Our habits control any change we may want to make in our lives. A person who wants to lose weight will benefit by habits of eating fewer portions, getting enough exercise, sleeping on time, etc. A student wanting to score well in exams would need a habit of studying with concentration and reducing distraction. A businessman wishing to grown his business needs to be punctual, focused and hard-working.

These are all patterns. And sometimes these are more important than our knowledge and our intentions.

Good habits are what lead us to success whereas bad habits our obstacles on our road to that success. Hence, it is as important to break bad habits as it is to form good ones. Charles Duhigg, the author of *The Power of Habit: Why we do what we do in life and business*, believes that forming and breaking of habits is a psychological process. In the last ten years, how we look at the psychology of habits has changed. Now we have new concepts regarding the neurology of habits. Most of the change in our understanding of habits has come from studying simple habits. Habits like biting nails and parallel parking. These are habits we do without thinking much. Once pathways form in our brains, we tend to repeat the same process without noticing.

A 24-year graduate student, Mandy was a chronic nail biter. The problem was so bad that while biting her nails; she would sometimes pull away the skin underneath. In fact, the ends of her fingers were blunt leading to itching in tingling, which is a sign of nerve problems. She tried to change her habit by putting foul-tasting nail polishes, but even those attempts failed. She made several promises to herself, but all of those would vanish as soon as she would put her focus on studying or watching television. When all her feeble attempts failed, she decided to get counseling at Mississippi State University. At the center, Mandy was referred to a doctoral psychology student who was learning about “habit reversal training.” This student was aware of the 'Golden Rule of Habit Change.'

The Golden Rule of Habit Change:

According to the Golden Rule of Habit change, each of our habits has three components. The first component is a cue, which is a trigger or alarm for an automatic behavior to begin. A cue is how our brain knows when to perform a habit. The second component is a routine that the behavior or process of the habit and lastly a reward, which is how our brains tells us to reward ourselves and remembers this habit for future purpose. Most of the times this entire process is performed subconsciously which is why it seems beyond our control. But the truth is that every habit formation is in our control and we choose which habits we want to form. According to the golden rule in order to change a habit, we need to keep the cue and reward same and insert a new routine. It is hard to banish a bad habit. It is easier to change it.

How our habits work:

Ann M. Graybiel, a Ph. D. professor at the Department of Brain and Cognitive Sciences, believes that even disorders have repetitive thoughts and behaviors. Diseases like Huntington's, Tourette syndrome and obsessive compulsive disorders display repetitive behavior problems. She mentions in her paper that all motor or cognitive repetitive behaviors develop by the action of the basal ganglia –based neural circuits. In more simple terms, habits are formed neurologically. Additionally, the more time we do a routine, the more the neural pathways get ingrained in our brains and we can use them more readily.

The picture about shows a simple loop which denotes the process of our

habits. MIT researchers who have been studying habits for a long time found that every habit consists of the three Rs. To be able to understand and finally alter our habits, we need to identify which components form our habit loops. Only after we have identified these components, can we begin to replace harmful habits by better ones. For example, say someone has a habit of picking up a bar of chocolate every time they go to the cafeteria. Due to this habit, they have piled on a few extra pounds which they are having trouble losing. People close to the person have commented on the weight gain, and they would like to get rid of it. The person has decided several times to not pick up the chocolate and has even put up a post-it on their desk to make sure the message is loud and clear. But even after all the efforts, the person ends up ignoring the note and the wish to lose the weight. It feels great to eat the chocolate every time but soon after a person feels regret. The only way a person can break this habit is by identifying their habit loop. First step is identifying the routine. The routine is getting up from the desk, walking till the café, buying chocolate and eating it while gossiping with colleagues. Post that, the cue and the reward are must be identified. Is the cue hunger, low blood sugar, boredom, tiredness, etc.? Is the reward the chance to catch up with friends, a need to be distracted or the chocolate itself? These questions are important to be able to change a habit. To figure these out, we need to do some experimentation to understand our habit loop better which is what finally leads to any change in them. The procedure was suggested to Mandy from our example above. The psychologist asked Mandy to think about what she feels before she moves her hand over to her mouth to bite her nails. She answered that there is some tension in her fingers and after she looks for

hangnails; she brings her hand up to the mouth to bite after that she ends up biting all her nails.

This explanation helps because when a person describes the triggers to their habits, they make the first step towards reversing the habit. The process is called the habit reversal training. For Mandy, it was the tension in her fingers and hands. Experts believe that people don't notice these cues since it has been so long since they have been doing it. Mandy recalled how she felt after biting all the nails, and she realized that the reward was a brief sense of completeness. Mandy marked a check card to mark every time she felt an impulse to bite her nails, the tension in her fingers. The idea here was to replace the routine and insert a new, harmless one.

Understanding the Reward System:

The reason rewards work is because they satisfy our cravings. For someone who is addicted to shopping, is rewarded by the new purchases. For someone who enjoys junk food, the rewards are the delicious food. However, these are more obvious rewards. There are usually deeper psychological reasons for the same. The marketing team at Febreze discovered that people wanted a new scent when done with their cleaning. They discovered a new craving while no one knew about or realized. Most cravings work this way. They hid in plain sight but were more obvious to us upon introspection. An interesting way to figure out such cravings is to experiment with various types of rewards. This process is a time-consuming process and can take even years. However, during this time people should not feel any pressure. Assuming the role of data scientists collecting data often helps.

For example, for the habit of eating chocolates, altering the routine to deliver a different kind of reward might help. A person may instead go and take a walk in the park or make a call to a friend and go back to the desk without having eaten anything. On the next day, it might help to go to the cafeteria but eat a bowl of fruits while chatting with colleagues. Over the next few days having a cup of coffee at the desk, going to the cubicles of friends and chatting with friends are other rewards that may help. The idea here is not the importance of these different rewards, but testing various hypotheses to identify the craving behind the routine. For instance, if the craving in this case is hunger, the bowl of fruits should suffice. If it is tiredness and the person needs a burst of energy, the cup of coffee should work. And if it is a bored, chatting with friends or taking a walk might help.

While testing for different rewards, it would help journaling the feelings. Once you are back from eating the fruits, taking a walk or chatting with friends, you should jot down the first three things in our minds. Set an alarm for fifteen minutes. After the alarm rings, notice if you still feel the craving for a bar of chocolate. There are two reasons for jotting down three random words. It brings us to an awareness of our thoughts. Studies show that writing something down helps us in remembering what we were feeling at a past moment. Once the experiment is over, we can easily remember what we were thinking and how we were feeling. The reason for checking after some time is to check for the reward we are craving. Post these fifteen minutes, if the craving for the chocolate still exists then the craving is not originating from hunger, boredom or tiredness. However, if, after the fifteen minutes, you can go back to your work, then the reward being craved was

one of the above.

This is why it is important to experiment with distinct rewards, since they help us understand what we are craving and why we are craving it. These things may be time-consuming but are essential to change habits and to maintain good habits for a long term. In fact, the study and understanding of rewards are so important, it is even used to treat people by changing the habits that harm their health. The paper, “Paying the Patient”, looked at the concept of providing a financial incentive to improve health. It mentions that there are two kinds of rewards, positive and negative. Positive rewards are rewarding the patient when they perform a good behavior. Negative rewarding is done by disciplining a person when they perform a harmful behavior by withdrawing the reward.

So, does behavior change by offering incentives?

Initially, the researchers did think that incentive, especially financial ones do help to alter behavior in people. However, this is not successful for all kinds of behavior. For example, when patients were offered ten US dollars to visit a depression clinic for their appointments, eighty-six percent of the patients turned up. This was in contrast to the sixty-nine percent without any incentives. People who were given incentives to keep their appointments for conditions like tuberculosis, flu, etc. displayed similar results. Experts realized that the incentive system was working best for altering simple behaviors.

However, when the same incentive technique was applied to the more complex issues, it showed disappointing results. When people were offered

incentives to quit drinking, smoking, smuggling or eating junk food, they would attend the programs but would lapse back into the old patterns of behavior. These behaviors are ingrained in our brains and are much harder to change. Of course, negative rewarding programs showed more promise but there were no long-term changes.

Karen Jochelson discussed the various factors that could lead to the success or failure of promising incentives. She mentions that the value of the incentives, the timing of the incentives, the skills of the individual test subject and the social support are the important factors of such a program. Let's take a look at how each of these factors influences the program.

Value of the Incentive: From the evidence, researchers discovered that the size of the incentive matters. The incentives of the alterations of simple behaviors were given to patients with low incomes. The rewards ranged from five dollars to twenty-five dollars. But these were given to people with below poverty line incomes. Results showed if the rewards offered were above people's incomes; they were more expected to follow through with the changes.

Timing of the Incentive: People prefer incentives that are available immediately preferred over higher valued incentives that would become available over time. This is in accordance to the need for immediate gratification that people have.

Skills of the Individual: Bandura suggested that self-efficacy is important about how people set goals and how much effort they apply to achieve these goals. It also determines how long they would persist on the goals. People with stronger self-beliefs were able to change their behaviors with more

ease. (Bandura 1995)

Social Support: Social Support is important as it may support some established behavior in the individuals. For example, in a social circle, all friends may enjoy drinking and may stop making plans with an individual who is trying to quit. Support from friends and family is important to make and sustain any changes. Additionally, people who work with other people to make changes, are more successful than those working alone. This is true of signing up for a gym with a partner.

Uri Gneezy, Stephan Meier, and Pedro Rey-Biel put together paper on “ When and Why Incentives (Don’t) Work to Modify Behavior”

They believe that when incentives are offered there arise conflicts between extrinsic effects and intrinsic effects of such incentives. For example, employers often agree to provide extrinsic incentives to high-performing employees. Should the same approach be taken with students? Should they be promised financial gains in order to achieve better attendance and grades? Or are intrinsic incentives like feelings of pride and completeness being effective catalysts. They believe that incentives must be designed carefully and with thoughts to what consequences they may bring about in our society.

Charles Duhigg suggests identifying cues amidst all our behaviors. He mentions that most habitual cues are from five categories. These categories are Location, Time, Emotional State, Other People and immediately preceding action. So in the example of wanting to eat a chocolate bar, if we identify all these five triggers, we would have identified the cues that make

us slip into our habits. Finally, he suggests having a plan in place to tackle when the cue hits. Having a plan is like having an implementation guide.

Conclusion:

People believe that it takes twenty-one days to form a new habit. According to James Clear, an entrepreneur, this number is a myth and the actual time needed for a habit to form is around sixty-six days. The truth is there is no one number proven to be the magical number for this research. Even the research done on patients for medical benefits or on students on academic benefits has not revealed any set patterns. After researching various sources, it is my opinion that incentives like financial gains do not work in the long run. Once the incentives disappear, the person would slip back into the old comfort habits. The only possible way to develop new habits or break/change old ones is to give us time to do so and have a plan in place. Charles Duhigg's approach has worked for several people. I feel the reason for this is that it encourages mindfulness and self-introspection. Change of any sort must start with an understanding why that change is good for us. Being mindful has more benefits than just forming new habits. It is a way to improve our focus and concentration. The plan that Charles Duhigg puts forward is a very healthy way to create long lasting change, and it is my proposal to conduct more research in this area.

References:

Jochelson, K. (2007, December 1). Paying the Patient. Retrieved November 30, 2014, from <http://www.kingsfund.org>.

[uk/sites/files/kf/field/field_document/paying-the-patient-kicking-bad-habits-](http://www.kingsfund.org/sites/files/kf/field/field_document/paying-the-patient-kicking-bad-habits-)

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supporting-paper-karen-jochelson. pdf

Gneezy, U., Meier, S., & Rey-Biel, P. (n. d.). When and Why Incentives (Don't) Work to Modify Behavior. Retrieved November 30, 2014, from [http://www.trinity.edu/eschumac/HCAI5313/JEP -- When and Why Incentives \(Don't\) Work to Modify Behavior. pdf](http://www.trinity.edu/eschumac/HCAI5313/JEP--When-and-Why-Incentives-(Don't)-Work-to-Modify-Behavior.pdf)

The Golden Rule of Habit Change. (n. d.). Retrieved November 30, 2014, from <http://psychcentral.com/blog/archives/2012/07/17/the-golden-rule-of-habit-change/>

The Golden Rule of Habit Change: How to Become a Habit Master. (n. d.). Retrieved November 30, 2014, from <http://www.4hourlife.com/2012/12/26/the-golden-rule-of-habit-change-how-to-become-a-habit-master/>

Charles Duhigg: The Golden Rule of Habit Change. (n. d.). Retrieved November 30, 2014, from <http://www.throughyourbody.com/charles-duhigg-golden-rule-habit-change/>

How Habits Work. (n. d.). Retrieved November 30, 2014, from <http://charlesduhigg.com/how-habits-work/>

Clear, J. (2014, April 10). How Long Does It Take to Form a New Habit? (Backed by Science). Retrieved November 30, 2014, from http://www.huffingtonpost.com/james-clear/forming-new-habits_b_5104807.html

CHANGE HABITS: Breaking Bad Behaviours by Owen Fitzpatrick. (n. d.). Retrieved November 30, 2014, from <http://www.youtube.com/watch?v=CojSIsMwDOg>

How the Brain Creates New Neural Pathways. (n. d.). Retrieved November 30, 2014, from <http://www.whatisneuroplasticity.com/pathways.php>

<https://assignbuster.com/free-the-psychology-of-habits-and-the-incentive-system-literature-review-sample/>

(n. d.). Retrieved November 30, 2014, from [http://www-3.unipv.it/dsffcm/pagine/labs/perin/oldstuff/kiro/rituals basal ganglia. pdf](http://www-3.unipv.it/dsffcm/pagine/labs/perin/oldstuff/kiro/rituals%20basal%20ganglia.pdf)

(n. d.). Retrieved November 30, 2014, from [http://monash.edu/sustainability-institute/assets/documents/seminars/12-07-24_bwa_verplanken_presentation. pdf](http://monash.edu/sustainability-institute/assets/documents/seminars/12-07-24_bwa_verplanken_presentation.pdf)

(n. d.). Retrieved November 30, 2014, from [http://www. cwru.edu/artsci/engl/Library/Vrettos--Defining Habits. pdf](http://www.cwru.edu/artsci/engl/Library/Vrettos--Defining%20Habits.pdf)

Habit. (n. d.). Retrieved November 30, 2014, from [http://www.oxforddictionaries. com/definition/english/habit](http://www.oxforddictionaries.com/definition/english/habit)

Classics in the History of Psychology. (n. d.). Retrieved November 30, 2014, from [http://psychclassics. yorku. ca/James/Principles/prin4. htm](http://psychclassics.yorku.ca/James/Principles/prin4.htm)

(n. d.). Retrieved November 30, 2014, from [http://writing. colostate. edu/textbooks/informedwriter/chapter9. pdf](http://writing.colostate.edu/textbooks/informedwriter/chapter9.pdf)

(n. d.). Retrieved November 30, 2014, from [http://www. ncbi. nlm. nih. gov/pmc/articles/PMC3434678/](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3434678/)

The Power of Incentives for Performance. (n. d.). Retrieved November 30, 2014, from [http://www. governing. com/columns/mgmt-insights/col-performance-incentive-funding-corrections-probationers. html](http://www.governing.com/columns/mgmt-insights/col-performance-incentive-funding-corrections-probationers.html)