

APPLICATION OF COGNITIVE DISSONANCE THEORY TO REDUCE DROPOUTS IN DISTANCE EDUCATION SYSTEM

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Abstract

The Distance Education System has taken the shape of a gigantic and intricate system. Gigantic because it has huge number of students, programmes, courses, operations and problems in managing them. It is an intricate system as there are lots of complications in ensuring support to the large number of students. While many things go to its advantage, there are some things, which work as disadvantages. For example, there are a lot of cases of students dropping out midway during their educational sojourn.

Most students drop out because of personal circumstances, initial expectations, quality of college facilities or to take up employment, etc. On the other hand, students find that good curriculum design, teaching methods and teacher-student and student-student relationships will have greater impact on dropout rather than the measures that improve facilities. The primary goal of this paper is to study the reasons for student dropout and suggest measures to reduce dropout. This paper applies Cognitive Dissonance Theory and tries to build a model with the help of ICT that can be employed in the Distance Education System (with special reference to IGNOU) to reduce the dropout rates.

Introduction

The Distance Education System has taken the shape of a gigantic and intricate system. Gigantic because it has huge number of students, huge number of programmes/courses, huge number of operations and also huge number of problems in managing these operations. It is an intricate system as there are lots of complications in ensuring support to the large number of students. While many things go to its advantage, there are some things, which work as disadvantages. For example, there are a lot of cases of students dropping out midway during their educational sojourn. Let us define what a dropout is: A dropout is “a person who leaves school, college or university before finishing a programme/course, or a person who lives in an unusual way”.

A report from U.K (1999) has found out that widely held beliefs given below contribute little towards dropouts. They shunned the beliefs that students drop out because of personal circumstances, initial expectations, quality of college facilities or to take up employment etc. On the other hand they found that good curriculum design, teaching methods and teacher-student and student-student relationships will have greater impact on dropout rather than the measures that improves facilities. Another trend showing study by Hargreaves (2001) found out that “With foreign students making up more than half the pool of US physics graduate students, it's not surprising that educators are worried by the seemingly disproportionate numbers who switch, mid-PhD, into areas such as computer science and engineering.”

Garland (1993) as quoted in Sharma(2002), categorized various reasons given by students for withdrawing from distance learning courses into four groups:

- **Situational** - these arise from a student's own life circumstances, such as changed employment situation;
- **Dispositional** - personal problems that influence the student's persistence behaviour, such as learning styles and motivation;
- **Institutional** - difficulties students encounter with the institution, such as limited support services; and
- **Epistemological** – difficulties faced by students while apprehending course content, etc.

Let us see some examples of these reasons.

Table 1: Why Students Drops?

Sno	Typology	Description
1	Dispositional	Placed on inappropriate programs/courses
2	Dispositional	Find it difficult to identify peers
3	Dispositional	Find that course is not interesting/ beneficial
4	Dispositional	Have obtained fee waiver or reduction
5	Epistemological	Face difficulty at the start of course/program
6	Institutional	Applied to college late
7	Institutional	Find that the quality of teaching is not good
8	Situational	Feels that courses is not job oriented
9	Situational	Are Males
10	Situational	Have difficult family and financial circumstances

Source: Based on Anonymous (1999) and Garland M.R. (1993)

According to Garland (1993), situational and dispositional barriers proved to be the primary causes of attrition in distance education. However the U.K. report (Anonymous, 1999) deduces epistemological reasons as the main reasons and the Hargreaves (2001) work highlights the situational reasons.

We had one primary aim in this paper and that was of reducing dropouts. This paper applies Cognitive Dissonance Theory (Leon Festinger 1957) and tries to build a model with the help of ICT that can be employed in the Distance Education System to reduce the dropout rates. Festinger(1957) postulated the Cognitive Dissonance Theory and commented, “, there is a tendency for individuals to seek consistency among their cognitions (i.e., beliefs, opinions). When there is an inconsistency between attitudes or behaviors (dissonance), something must change to eliminate the dissonance. In the case of a discrepancy between attitudes and behavior, it is most likely that the attitude will change to accommodate the behavior”.

Let us see in detail what is cognitive dissonance.

Cognitive Dissonance

According to Wikipedia, the free encyclopedia, cognition is used in different connotations. It could refer to the mental processes of an individual or an act of knowledge. Dissonance is disagreement or a conflict of people's opinions or actions or characters.

Kearsley(2005) stated that “according to cognitive dissonance theory (Festinger , 1957) there is a tendency for individuals to seek consistency among their cognitions (i.e., beliefs, opinions). When there is an inconsistency between attitudes or behaviors (dissonance), *something must change* to eliminate the dissonance. In the case of a discrepancy between attitudes and behavior, it is most likely that the attitude will change to accommodate the behavior.

Two factors affect the strength of the dissonance: the number of dissonant beliefs, and the importance attached to each belief. There are three ways to eliminate dissonance:

- i. *Reduce the importance* of the dissonant beliefs,
- ii. *Add more consonant beliefs* that outweigh the dissonant beliefs, or
- iii. *Change the dissonant beliefs* so that they are no longer inconsistent.

Dissonance occurs most often in situations where an individual must choose between two incompatible beliefs or actions. The greatest dissonance is created when the two alternatives are equally attractive. Furthermore, attitude change is more likely in the direction of less incentive since this results in lower dissonance. In this respect, dissonance theory is contradictory to most behavioral theories, which would predict greater attitude change with increased incentive (i.e., reinforcement”).

Matz & Wood (2005) demonstrated effect of group-induced dissonance. They found that the dissonance is attributed to lack of choice and opportunity to self-affirm. They asserted that this dissonance could be reduced through a variety of interpersonal strategies to achieve consensus.

Some Examples to Eliminate Dissonance

There are many examples of explaining the aforesaid ways to eliminate dissonance. We will quote three such examples in order to explain what this theory is all about. We will then try to emulate a distance learner with this, in order to highlight the usefulness of this theory to the cause of dropouts.

Table 2: Some examples to eliminate dissonance

Sno	Reference	Problem	Dissonance	Reduce*	Add*	Change*
1	Wikipedia (2005)	Purchasing a brand of washing machine thinking that it is the best brand	There is a better washing machine out in the market (as seen in an advertisement)	A person would purposely avoid other washing machine advertisements knowing that the decision had been made	Finding out about other products could lead to some discomfort.	One may deride the new improved washing machine, and perceive the new advertisement as untrue.
2	Kearsley Greg (2005)	Someone buys an expensive car	Discovers that it is not comfortable on long drives	It does not matter since the car is mainly used for short trips	Focusing on the cars strengths such as safety, appearance, handling	Getting rid of the car
3	Barker Phil (2003)	I am 100% sure the Earth is round!	When an alternative view is presented	I'll never venture beyond the town where I live, so it does not matter if the Earth is flat or round.	The Earth casts a round shadow on the moon, so it is possible the Earth is round.	Magellan circumnavigated the Earth, so it cannot be flat.

Now let us take the case of a distance learner who has taken admission in a particular program. There could be many dissonances but for instance, take a particular dissonance such as program not worthy of wasting time upon. In order to reduce the importance of this dissonant belief, one can say that it does not matter since you are not using this time in other fruitful activities either. To add more consonant belief that outweigh the dissonant belief one can say that education does not go waste and there is no harm in completing the program. To change the dissonant belief and remove inconsistency one can prove the utility of the program or show the job profile of his seniors.

Usefulness of Consonance

According to Smith (1999), Cognitive dissonance can motivate and challenge learners to think critically about their beliefs and cognitions, thereby enabling learning. It has implications for instructional designers. The distance learner in particular has much cognition as he is separated from his peers. When a dissonance comes in between he must be given some incentive/weightage so that he achieves consonance.

Stone Jeff & Cooper Joel (2001) commented. “ By focusing on the cognitive processes by which people interpret their behavior, detect the presence of a discrepancy, experience and label their arousal, and seek a strategy for its reduction, we believe that dissonance theory can move forward in new directions that continue to present important insights into human social behavior”. There have been many applications of cognitive dissonance theory in the field of Education, Management and Social Sciences.

Cognitive Dissonance is associated with the negative influence. It is therefore one to focus on getting rid of the discomfort situation. Dropping out is one of the easiest ways to end the discomfort situation. Achieving consonance can make the student escape from dropping out. According to Harmon-Jones (2004) dissonance results when one “freely chooses” to engage in behavior that is inconsistent with an attitude or belief. One must try to change attitudes and behavior of those students that are “possible dropouts”. Khare, Saxena & Garg (2004) has discussed a model for identifying such students who can be deemed as “possible dropouts”.

Let us see some examples of motivational remedies for “future or would be” dropouts. We have already listed the reasons attributed for dropping out e.g., placed on inappropriate programs/courses, find it difficult to identify peers, find that course is not interesting/ beneficial, have obtained fee waiver or reduction, face difficulty at the start of course/program, applied to college late, find that the quality of teaching is not good, feels that the course is not job-oriented, have difficulty in family and financial circumstances.

Let us the first reason, “placed on inappropriate programs/courses”. The motivational ways for reducing this dissonance is to enable this student to purposely avoid information about other programs and courses knowing that the decision had been made. He should think it in this way that it does not matter since education never goes waste etc. To add a consonant belief we can apprise him on the strengths of the program he is pursuing. To change his dissonant belief, we may give counter reasons that deride his dissonance and bring consonance e.g., this degree is recognized for all the public sector jobs while the “better program” that has created dissonance in him is acceptable in the private sector only.

Conclusion

We have tried to build a framework as to how “ Cognitive Dissonance theory” can help in bringing a change in attitude and behavior in a student that is hell-bent on dropping out. There are many ways to do this. We have to build a repository of positive thoughts in the form of frequently asked questions (FAQs) and put them on the university website. The link should be propagated to all those “would be” dropouts. There are already some initiatives towards this. For example IGNOU’s website contains a link <http://www.ignou.ac.in/stridehandbook2/section7.pdf> which tells the students about Studying: what when and how or section 5 which tells about time management: how can I find time? So the importance should be given to develop such resources which act as dissonance crunchers.

We would end with a piece of advice for the “would be” dropouts by quoting McKay & Fanning (1990), “ I seek knowledge in order to make wiser choices. My daily job is to broaden my knowledge. I can do whatever I want, but what I want is determined by what I know”.

References

- Anonymous (1999), "Why students drop out of further education", *Education & Training*; 41, 1; ABI/INFORM Global pg. 41 (UK Report).
- Hargreaves Lynley (2001), "Dropout rate among Chinese physics PhD students seems high; community considers why", *Physics Today*, New York: Vol.54, Iss. 5; pg. 24
- Garland, M.R. (1993) "Student Perceptions of the Situational, Institutional, Dispositional, and Epistemological Barriers to Persistence." *Distance Education* 14:2, 181-198 as quoted in Ramesh Sharma (2002).
- Sharma (2002) Ramesh C., "Student Retention In Open And Distance Learning System" in *proceedings of 15th annual Asian Association of Open Universities Conference* held in New Delhi on 21-23 February 2002
- Festinger Leon (1957), *A Theory of Cognitive Dissonance*, Stanford University, Stanford, Calif.
- Matz David C, Wood Wendy (2005), "Cognitive dissonance in groups: The consequences of disagreement", *Journal of Personality and Social Psychology*. Washington: Jan 2005. Vol.88, Issue. 1; pg. 22.
- http://en.wikipedia.org/wiki/Cognitive_dissonance for various definitions. Site accessed during July-August 05.
- Kearsley Greg, *Explorations in Learning & Instruction: The Theory Into Practice Database*, <http://tip.psychology.org/index.html>
- Barker Phil (2003), "Cognitive Dissonance", http://www.beyondintractability.org/m/cognitive_dissonance.jsp , Site accessed on Aug 22, 2005.
- Smith Karen(1999), "Cognitive Dissonance", <http://coe.sdsu.edu/eet/articles/cogdisthry/index.htm> , San Diego State University. Site accessed on Aug 22, 2005.
- Stone Jeff & Cooper Joel (2001), " A Self-Standards Model of Cognitive Dissonance", *Journal of Experimental Social Psychology*, 0022-1031/01, Academic Press.
- Harmon-Jones Eddie (2004) , "Contributions from research on anger and cognitive dissonance to understanding the motivational functions of asymmetrical frontal brain activity", *Biological Psychology* 67 51–76
- McKay Matthew and Fanning Patrick (1990) , *Self Esteem*, New Harbinger Publications Inc..
- Khare, Pankaj, Saxena, Anurag and Garg Suresh (2004) Performance Analysis of IGNOU Science Students in Theory Courses through Data Mining, *Indian Journal of Open Learning*, 13 (1), 29-49.
- <http://www.ignou.ac.in/stridehandbook2/section7.pdf>