

Exploratory study of video collection browsing behaviour of patrons in an academic library

M. Yasser Chuttur

School of Library & Information Science,
Indiana University, 1320 E. 10th St., LI 011
Bloomington, IN 47405-3907, USA
e-mail: mchuttur@indiana.edu

ABSTRACT

Previous studies on browsing have mostly focused on print materials and websites. The present research investigates the browsing behaviour of patrons when interacting with video collections. Using non-participant observation method, 22 patrons were observed browsing video collections in a large Midwestern university library over a period of three days with each observation lasting for an hour. To supplement some of the observations made, four of the observed participants were also interviewed. Observations show that when compared to previously reported findings on browsing behaviour of patrons with print materials and websites, the same browsing patterns seem to emerge when individuals interact with video collections. In addition, this study reveals that patrons frequently showed feelings of frustrations when it came to selecting a video. One possible reason could be the lack of information available to patrons for helping them in their decision making process. Further studies are, however, required to substantiate this claim.

Keywords: Browsing behavior; Video collections; Information behaviour; Shelf browsing; Non-participant observation.

INTRODUCTION

Browsing is an activity that forms an integral part of human information seeking behaviour. People usually browse in libraries, grocery stores, clothing stores, department stores, newspaper and magazines stalls, as well as the Internet for information. In general, browsing is perceived as a process that brings individuals to the entity they might be interested in without the need to follow any pre-defined search strategy. Consequently there have been several studies that have attempted to explain the process of browsing as a human behaviour. The outcome of these studies is generally intended for service providers whose aim is to ensure that patrons are able to effectively browse through their products/collections to readily obtain what may be of interest to them.

One of the main tasks of the Library and Information Science (LIS) research community concerns the search for efficient methods for delivering information to those who are in need of it. Given that libraries and the web contain massive amount of information, there have been numerous research carried out to understand the concept of browsing in both of these settings. As a result of these studies, numerous explanations for browsing have been proposed that were able to give an understanding on how patrons access information when there is no predefined searching goal. Most of these studies, however,

have focused on browsing behaviours of patrons when interacting with textual materials such as book collections, journals and magazines. These materials have rich textual contents that people may consult in order to make a decision of whether or not the material at hand may serve their information need. The same principle applies to web pages. Since most web pages are rich in textual information, people have the luxury of quickly scanning through the contents of a web page to decide whether or not the material meets their information need.

Video collections, such as DVDs and VHS tapes, however, have characteristics that are different from text-based materials. Their full contents can only be viewed with additional technological support such as a DVD player and VHS tape player with a suitable monitor screen. To aid in identifying their contents without any technological support, the covers of DVD and VHS tapes are usually designed in such a way that they contain certain textual information and coloured illustrations that assist individuals in deciding whether the particular material may satisfy their information need. Oftentimes, the information that is included on the cover of a DVD/VHS includes a short description of the contents of the video, a relevant title, the name of the characters playing in the video, duration of the video, producer information, names of individuals or organisations that contributed to the video, technical information about the media, and any associated copyright information. This limited information provided on the DVD cover, in the absence of other information, such as reviews or recommendations usually remain the sole source of information that individuals can use to make a decision whether the video may be useful or not for their information need. Figure 1 shows a typical example of the kinds of information provided on the cover of the famous “Harry Potter” DVD video.



Figure 1: Types of Information Supplied on the Cover of a DVD Video.

With a growing number of fields of studies, such as music, journalism, business, and telecommunications incorporating the use of videos in their teaching and research activities, it has become an important function for many academic libraries in North American universities to service video collections to their patrons. Along with similar services provided when it comes to print materials, videos such as DVDs and VHS tapes are also organised on shelves with their spines facing outwards as shown in Figure 2. Libraries do not distinguish between the way different kinds of media should be organised and patrons are expected to satisfy their information needs using similar strategies when interacting with either print or video materials.



Figure 2: DVDs and VHS Media Organised on Shelves with Cover Spines Facing Outwards.

Given that video media offer limited information that patron can rely on, the researcher conducted a study that investigates the browsing behaviour of patrons when interacting with video collections. The study seeks to understand if there is there any difference between the browsing strategies employed by patrons when browsing textual materials as compared to browsing strategies undertaken when browsing video collections. To aid in the comparison task, the researcher relies on previous studies that have reported browsing behaviours of patrons when interacting with textual materials. This paper describes the methodology used for the present study, following which observations made are reported, analysed and compared to findings from previous studies. The paper finally concludes with the results obtained and it also provides suitable direction for further studies.

LITERATURE REVIEW

Cove and Walsh (1988) considered browsing at a general behavioural level viewing it as a complex process that involves both searching and browsing. They claim that a typical browsing strategy will comprise directed search browsing where the goal is known; general purpose browsing which consists in consulting sources that may have items of interest, and serendipitous browsing that is a purely random process. Kwasnik (1992), on the other hand, looked at browsing at a more granular level explaining that browsing is a set of motions in an interlinked space in which an individual undertake certain actions such as shifting their gaze, altering their position, skipping over things, glancing briefly at things, from afar or close up, backing up, pausing, stopping and responding to interesting phenomena. O'Connor (1993) further elaborated on the cognitive processes involved in browsing and concluded that there can be four phases in such activity: making glimpses, connecting attributes, evaluating connection and evaluating search. Ridley et al. (1995) on

the other hand considered browsing as simply a process of opening a book, displacing or borrowing a book, while Toms (2000) described browsing as “an activity in which one gathers information”. Rice, McCreadie and Chang (2001) suggested a model of the browsing process as one that consists of the behaviour of scanning driven by the motivation of having a goal, which is directed towards an object characterized by a form.

Despite previous studies, Chiharu (2003) argued that the browsing behaviour of patrons was still unclear. He observed the behaviour of 40 patrons in two bookstores and two libraries and he found that patrons would check the shelves of the libraries or bookstores one by one; re-checking the shelves while already holding a different book; picking up the book another person has just put back; stopping to check books that laid flat on the shelves; returning books on the shelves unopened; turning through pages of books without really reading through, and opening pages randomly. He also found out that patrons would usually be influenced by different factors to choose what to carry away with them. Furthermore Chiharu believes that an individual will judge these factors according to certain standards before actually making the decision to take any book or not. He therefore proposed that browsing can be classified and defined as the process of selecting necessary material among many according to certain standards by using every sense available in order to satisfy a certain requirement but whose target remains fuzzy at the beginning. Bates (2007) suggests that browsing is “the activity of engaging in a series of glimpses, each of which may or may not lead to closer examination of a object, which may or may not lead to acquisition of the object.”

Clark et al. (2006), in a different setting, focused on how students browsed through websites. The aim of their study was to understand user browsing behaviour and the extent to which such behaviour changes over time. Following an earlier study by Canter, Rivers and Storrs (1985), Clark et al. (2006) identified browsing as consisting of various strategies that can be categorized under various patterns. They first identified four basic routes that patrons usually take to move through a site. These are:

- Path: a route that does not visit any one node (spot) twice.
- Ring: a route that returns to the starting spot.
- Loop: a route that crosses a previously visited spot.
- Spike: a route that retraces the original path on the return journey.

They then proposed that by combining these routes, different patterns can be created, which in turn can explain different browsing strategies that had already been proposed by Canter, Rivers and Storrs (1985). Table 1 summarises the findings by Clark et al. (2006). Their results showed that users exhibit different browsing strategies while moving through an information space. In addition they also found out that time usage is an essential factor to determine browsing strategies on websites. This idea was further developed by Pirolli and Card (1999), who considered that expertise, familiarity with a site, time pressures, and perceived cost of information directly affected browsing behaviour of individuals.

It follows from these studies that browsing remains a complex human behaviour but with observable patterns as illustrated in Table 1. It is also seen that an individual’s browsing behaviour is affected both by intrinsic and extrinsic factors. Common to intrinsic factors, are the characteristics of the physical object, which in this case, is the book cover, the title, the contents, and the way the book is presented on the shelf. It is also evident that extrinsic factors such as time pressure and perceived cost of information will affect the browsing strategies of individuals. While previous studies have focused on print materials

and websites, the present study explores the behaviour of library patrons when they browse through video collections.

Table 1: Routes and Browsing Strategies

Strategy	Probable user goal	Pattern – route taken
Scanning	Cover large area without depth	Mix of deep spikes and short loops
Browsing	Follow wherever site goes until item of interest is encountered	Many long loops, some large rings
Searching	Look for specific item in site	Ever increasing spikes and some loops
Exploring	Examine extent and nature of site	Mix of many different patterns
Wandering	Amble through site in unstructured manner	Many medium sized rings

OBJECTIVE AND METHOD

This research explores the behaviour of library patrons when they browse through the video collections of one of the largest Midwestern academic library using non-participant observation. The following research question is posed: “How do individuals browse video collections?” To address this primary question, three secondary questions are formulated as follows:

- How do patrons move within an information space that provides video collections?
- What are the actions performed by patrons when browsing through stacks of videos?
- Are there any external factors that affect the browsing behaviour of patrons?

These questions will help to understand the way individuals browse video collections and determine whether there is any difference between the way individuals browse textual materials and video collections.

In non-participant observation, the researcher is present at the scene and assumes the role of a spectator without having any interaction with the individuals being observed. As expressed by Cooper, Lewis and Urquhart (2004), non-participant observation method has the benefits of allowing the collection of rich and directly observed data at a relatively low cost. In addition, Webb et al. (1996) argued that by not interacting with the subjects being observed, the researcher is able to obtain results that have the benefits of being highly valid and that reflect the natural behaviour of subjects. Babbie (2007) moreover explained that observation research is typically suitable for understanding human behaviour and discovering social patterns that are best understood in their natural settings. The current study is exploratory and as Babbie (2007) explains, the purpose of such kind of study is to (a) gather sufficient information that can help provide a general understanding of the phenomenon studied, in this case, the browsing behaviour of patrons when interacting with video collections; (b) test the feasibility of undertaking a further research; and (c) develop suitable methods to be employed in any further study on the subject investigated.

In this study, the research setting is a video collection section established in 2001 located in the first floor of the main library of a large Midwestern university. The university in question has existed since the 18th century and has currently about 37,000 full-time

enrolled students, of which about 70% are local state residents, while the remaining 30% comprises students from the other 49 states in North America and other foreign countries. Although the main library has 10 branch libraries, it remains the most visited library on campus with over 1000 patron visits every day. Compared to the size of the main library, which is a multi-floor double tower building with about 4.6 millions volumes, the video collection section, is a relatively small space which houses only about 13,000 videos on several open shelves that patrons may borrow items from. The browsing collections consist of DVDs and VHS tapes covering a number of genres, such as documentaries, fictions, animations, and theatre plays. The video collection is available in different languages including English, Chinese, Arabic and Hindi. Videos are ordered alphabetically by their titles on several shelves except for documentaries which are organised according to call numbers following the Library of Congress Classification System. The method for organising videos is similar to traditional print materials and patrons can browse through the collections by moving freely around shelves held in the video collection section (see Figure 3).

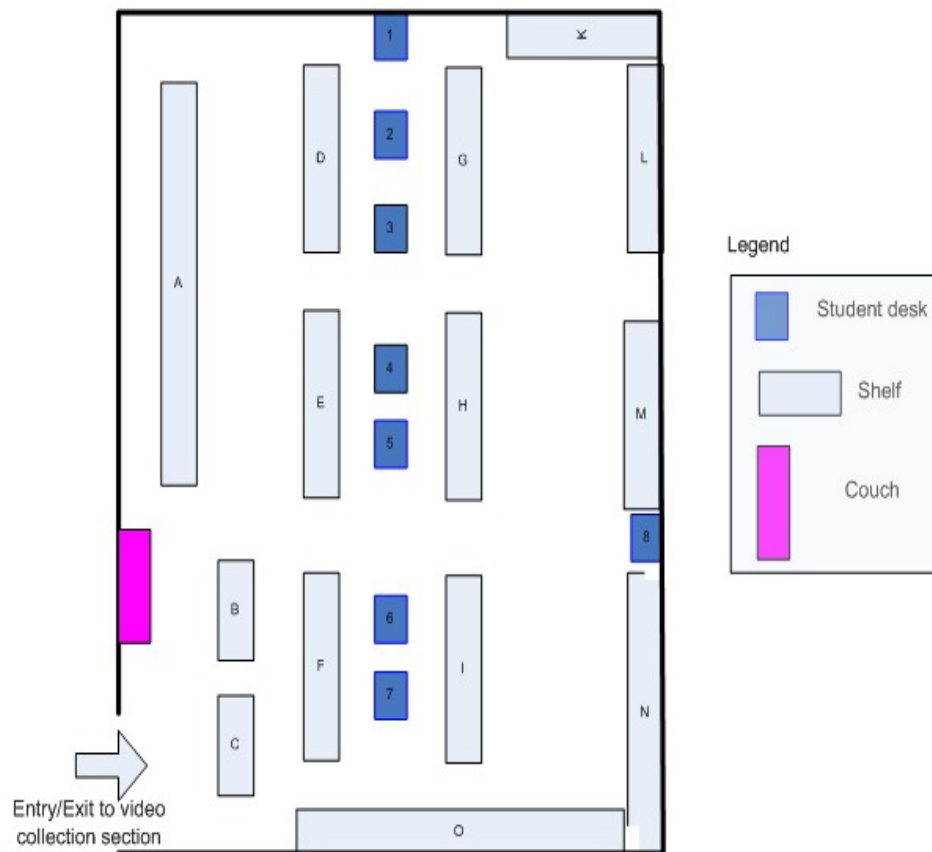


Figure 3: Layout of the Video Collection Section under Study.

The design of the video collection section is such that there is only one entrance that also serves as exit to the location, making it easy to monitor traffic in and out of the area under study. Besides containing shelves (labeled with alphabetical letters) containing stacks of videos, the video collection section also contains several small tables (labeled with numbers), which patrons usually sit at in order to do casual readings. This allowed the researcher to sit at a suitable position so as to have unrestricted visual access to the

behaviour of patrons while they browsed through the collections. Throughout the duration of the observation sessions, the researcher sat at table 5 (see Figure 3) giving him a suitable line of sight for patrons behaviour occurring at the centre of the location. Because of the layout of the video collection section and the arrangement of the shelves, no observation was made when patrons browsed through the stacks labeled A, B, C, K, L, M, N and the visually inaccessible sides of shelves labeled D, E, F, G, H, I and O. All patron behaviour when browsing those shelves observed were recorded as field notes on a paper notebook.

Browne (1978) suggests that observation research should be carried out in a suitable environment, where the group being observed is accessible and convenient. The video collection section, during class sessions, usually receives about 300-400 patron¹ visits a day, but would receive only around 50 visits during study breaks. The hours of operation are Monday through Thursday, from 8 a.m. to midnight, Friday 8 a.m. to 9 p.m., Saturday 10 a.m. to 9 p.m. and Sunday 11 a.m. to midnight. This study was carried out in the last week of December during class break when fewer students were expected to visit the video collection, making it easier to collect observational data. But given that observation can be a tedious process and requires full concentration, the research plan involved collecting data for one hour period only. Sufficient time was also required to record notes on a notebook, analyse the data collected and prepare for the next observation. So, the time periods for collecting data were purposely chosen so that fewer patrons will be visiting the video collection section. It was learned from the check-out desk² of the video collection section that weekday evenings, except for Friday, usually receive the less visits. Therefore, the days and time period for collecting data were purposely chosen as Monday, Tuesday and Wednesday during the time period of 4-5pm.

A convenient sample of 22 patrons was observed over the three days (7 patrons on the first two days and 8 patrons on the last day) during the one hour period on each day. Although only adults were observed, no particular attention was given to any group with specific demographic characteristics of gender and race. This is because these variables, at this stage of the research, were not considered primary to the current study. Patrons observed consisted of both males and females, and were of different ethnic groups that were part of the multi-cultural population of the university where the study was carried out. In consequence, the unit of analysis was set to be the observable actions that a patron would take to browse the shelves of the video collections.

All actions relevant to browsing were, thus, recorded as field notes on a paper notebook. The information collected was unstructured since no predefined categories of behaviour were anticipated. On the second and third day of observation, four of the observed individuals were informally interviewed (2 patrons on each day) in order to verify the trustworthiness of the inferences being made on the observed patron behaviour. The interview session lasted from 5-10 minutes and did not follow any structure since the questions mostly emerged from the observed behaviour. Moreover, no personal data was collected from the patrons interviewed.

It should be noted that every effort was made to record the actions of the patrons, but non participant observation as a research method has inherent limitations that cannot be

¹ From personal communication with clerical worker at the video collection check out desk.

² Located in a room annexed to the video collection section.

ignored. Certain patron actions may be missed, the researcher's own subjectivity may also bias the findings and the patrons observed may not necessarily be representative of the larger library population. To cater for these limitations, a follow-up study, if deemed necessary, should include more observers with the support of video recording so as to observe more individuals and also to reduce the subjectivity in the data collected. Ideally, longer observation periods would provide deeper insights in the browsing behaviour of patrons, but, despite the limited number of hours that was allocated to observe patrons for this study, sufficiently rich information was collected on the browsing behaviour of patrons when it comes to interacting with video collections. This information was extracted from the raw field notes during an analysis process using an inductive method.

OBSERVATIONS AND DISCUSSIONS

The aim of this study is to explore the actions that patrons take when browsing video collections. By action is meant any body movement, in whole or part, which is directed towards locating items of interest from shelves containing video collections. In other words, the observation was focused on how patrons move around in the video collection section from shelves to shelves. The researcher was also interested in the way patrons move their head, eye gaze, body and arms when they browsed shelves. Since there were no predefined categories of movements anticipated for this study, raw data was collected as field notes, which was later analysed for emerging patterns. The extracts shown in Figure 4 are taken directly from the raw field notes that were collected during the three days of observations. Interesting observations are underlined to highlight the typical bodily actions that patrons took when they browsed the video collections while noticeable feelings expressed by patrons are marked in bold.

Analysis of the field notes revealed a predictable pattern among patrons visiting the video collection section. In terms of spatial movement within the video collection, it is found that patrons usually have an initial straight movement towards a shelf. This is exemplified by the multiple times patrons were observed to head directly towards a particular shelf as soon as they entered the video collection section. This may happen when a patron knows exactly what he or she is looking for and also knows where to find the item. The case where a patron returned to the video collection after having left unsatisfied from a previous unsuccessful attempt to then readily obtain a DVD clearly illustrates this possibility (see Figure 4, observation day 2, paragraph 2). One of the interview responses also show that sometimes a patron comes with a predefined idea of what he or she is looking for. In consequence, some patrons may sometimes have a fixed goal when they come to the browsing section while others make up their mind while shuffling through the collections. As illustrated by the extract from the interview response below (I: interviewer, R: Respondent), preconceived idea of what to look for usually comes from reading reviews about videos. It is also noted that time is a very important factor to consider when it comes to looking for a video.

I: Can you tell me how long do you usually spend to look for a video?

R: *Well, I usually take 10 to 20 minutes to get one, but it depends on how much time I have, if am in a hurry, I don't spend too much time.*

I: Do you usually have anything on mind before coming here?

R: *Well I come here after reading a review or sometimes, I just look at the covers, title.*

I: So do you find any difficulty in looking for a video that interests you?

R: *Not really, I usually can get away with something that interests me.*

Observation Day 1 field notes (extract):

...Here are two students coming. They are heading directly* for the shelf D. I can see that they are removing DVDs from the shelves and looking at the covers. They keep removing and replacing some videos from the shelves, looking at the DVD collection and not appearing quite sure. Sometimes sitting down, (probably tired). Now they are walking back and forth through the aisle in a random order. Finally about fifteen minutes of walking back and forth exploring the stacks of DVDs, one of them went away. The other student is still contemplating the shelves. Here I see a young lady coming in and heading straight for the shelf F. I directed my attention to her now. She is busy shuffling through the DVD stacks, walking to the next shelf I, leaning her head and showing some difficulty in reading (apparently **not satisfied***). She now looks at the stacks of DVDs that are above the ones she started looking at. She is taking a long time to decide and **not appearing satisfied**.

Observation Day 2 field notes (extract):

...One of the individuals left and the other one stayed, with her eyes searching through the shelves. I see her taking one DVD out of the stack she is contemplating at. She is reading the back cover, **not seeming quite satisfied** and I can see that she has a paper as well. [I guess she has a specific title that she is looking for]. She suddenly apparently **frustrated** and left the video collection section without any video...

...here she comes again [after about 5mins]. I am now really at a lost. I am not sure where to look. Along with her, came four students and I cannot stay at a single place to observe them all. In fact I cannot observe all of them. I will focus on the lady that came back. It seems like now she knows exactly where to look for and I see that she took a DVD quite easily from shelf E and left [I assume she got directions from the video collections check-out desk about the particular video she was after]...

...Another student just arrived. She is walking around the different shelves in loop stopping occasionally at a shelf and turning to another [doesn't have any paper in hands...apparently she doesn't have anything in mind]. She is scratching her cheeks, bending down, looking up, eyes searching with curiosity and reluctantly walking. I see that she is holding 2 DVDs in 1 hand, and looking for another one. She now takes a DVD from the shelf and reads the back [cannot see her face-so am not able to judge her expression]. And finally still holding the third DVD, she left.

Observation Day 3 field notes (extract):

...I have been here for more than fifty minutes now, a subject has just entered the room, she heads for the shelf I. She is moving sequentially from one shelf to the other while looking at the stacks of videos on them. Now she stops and gets something out, reads the back cover, replacing it back on the shelf and walking back, head leaning right to left. There is another patron at another shelf looking at the stacks of videos. Even further away a patron is searching through a different shelf. At this time I can see many heads leaning back and forth. [It is evident that the DVDs or VHS titles are not easy to read when they are on shelves]...

...Here comes another patron. He heads directly for shelf G and starts shuffling through the videos (I note that he is not interested in VHS tapes since he is only looking at DVDs). I can see him, reaching for a DVD, removing it, and without replacing it back, pausing at another one lying on the shelf. He then started reading the back cover of the one he earlier took off the shelf. [His facial expression shows that he is **not very satisfied**]. He is taking a very long time to read this short summary...some of my previous observations showed that people usually will quickly glance at the summary...this student is demonstrating a different behaviour. He finally places the video back on the shelf. He takes another one and after looking at the front cover, turns it to read the back cover and again, not very satisfied, replaces it back on the shelf. He has been here for more than twenty minutes, and has been scanning through the whole stacks of shelf G. Finally he is leaving [facial expression showing that he is **not satisfied** at all].

* Underlined phrases highlight typical bodily actions of patrons while bold phrases describe different feelings that were noticeable during the observation period.

Figure 4: Extract of Field Notes Recorded during the Three Days of Observation

But most other times, patrons would rarely stay at one shelf. They would constantly move to other shelves exploring the different stacks of videos available until they come across something that interest them (see Figure 4, observation day 1, paragraph 1; observation day 2, paragraph 3; observation day 3, paragraph 1). The movement from one shelf to the other can be random, sequential or in loops. Sequential movement while browsing, for example, was further supported by the interview responses collected as shown by the interview response below.

- I: How do you look for a video?
R: *Hmm I start with row A (titles starting with alphabet A), then row B and so on until I find something interesting.*
I: Do you find it difficult looking up the videos by titles?
R: *Well I don't mind having by title, I just go through them and I don't really have anything in mind.*
I: But then how do you know which video to take?
R: *Basically looks at name, cover-titles and if it looks interesting, I take the video.*

Similar to different movements within the video collection space, patrons exhibit various types of actions while browsing through a shelf. Patrons were observed to scan multiple rows of the shelves as they would bend to view at lower stacks after they looked at upper stacks. Noticeable similarities among patrons were that they would be taking out and replacing videos back on the shelves, sometimes reading the cover summary, other times only glancing at the cover picture, but all tilting their heads sideways and sometimes spending much time trying to look for something of interest depending on the reason for which the movie is required. The interview response below illustrates the case where a student spent almost an hour looking for a movie. This particular patron was observed to visit the video collection section multiple times on the same day. When interviewed, it was learnt that he was looking for a video on a topic that was assigned for a class assignment.

- I: Do you have anything particular on your mind [when you look for video]?
R: *Sometimes yes, sometimes no.*
I: And when you do not have a title on your mind, how do you look for a video?
R: *Well, I walk around and I look at the cover contents.*
I: What about now? Do you have anything on your mind?
R: *I do. One of my professors asked us to watch a video on a given topic, so I am looking for one that is interesting.*
I: I see, and how long does it take you to get a video?
R: *I don't know. I just look for one.*
I: What about now, I saw that you came earlier and then left and came back again? Are you looking for something in particular?
R: *Actually I have a paper to write on a given topic and I am looking for an interesting one.*

It follows that the browsing behaviour of patrons when they interact with video collections are very similar to the behaviour reported in the literature review when it comes to browsing print materials and websites. In most cases, the browsing behaviour described by Chiharu (2003) was observed. Most patrons showed different physical actions while browsing. They checked each of the shelves one by one; re-checking the shelves while holding a video; stopping to check videos on the shelves; returning videos without even reading the cover; glancing at the cover, and selecting videos randomly.

Furthermore, patrons were observed to take different paths or strategies while moving around the shelves within the video collection section. This confirms the observation made

by Clark et al. (2006) and Canter, Rivers and Storrs (1985), who suggested that individuals take routes when they browse through an information space. These routes can give rise to different strategies. In the current study, the researcher observed that some people would start from one shelf and then move to the other following a random, sequential or loop movement.

Moreover, time, as Pirolli and Card (1999) mentioned, is also an important factor in determining the browsing behaviour of an individual. Some people spend more time looking for a movie if they have time to do so, otherwise they spend lesser time, and if they do not see anything interesting, they simply leave. In addition, the importance of the movie (e.g. when recommended for a class assignment) will highly influence the time spent in looking for that same movie. This is analogous to Pirolli and Card's (1999) notion of cost of information which they say directly affects browsing behaviour of individuals.

And as Cove and Walsh (1988) claimed, some individuals had their goals known in advance; others were browsing in the hope of finding something interesting, while the rest were browsing totally randomly. The researcher also observed that most of the patrons in the current study were scanning through the shelves, changing position constantly, skipping over movies, moving backward and forward and stopping where they would find something of interest, such as a DVD laying flat on the shelf. This further confirms Rice et al.'s (2001) notion of scanning and Kwasnik's (1992) description of specific actions performed when interacting with a book on a shelf. Last but not least, Bates' (2007), O'Connor's (1993) and Tom's (2000) explanations of browsing were also verified during the observations. Some patrons will have a goal in their mind and will engage in a series of physical and cognitive actions to eventually make a decision. Cognitive behaviour was especially observed when patrons spend time looking at the illustration on the front cover and reading the description on the back cover. In other words, observations made in this study seem to suggest that browsing behaviour of patrons do not vary with the media. Regardless of whether the item being browsed is print, website or video collection, patrons exhibit the same patterns of behaviour.

In contrast to browsing behaviour reported for print materials however, the researcher observed mixed feelings of satisfaction and frustration (see bold italic emphasis in Figure 4). This particular behaviour was not noted by previous research on browsing behaviour. In some cases, patrons looked satisfied while in other situations, they left without taking any video and showed signs of frustrations. Patrons also did not seem very satisfied when they read through the back cover summary of the video covers. Why was this so?

One possibility could be that since additional technology, such as a DVD player, is required to view the contents of videos, patrons are limited in their decision of whether a certain video would satisfy their information need. They rely on the illustrations and summary on the video covers to make their decision and sometimes such information may not be sufficient. When browsing books, a patron has the ability to consult the table of contents and shuffle through the actual contents of the material. This provides additional information that a patron can rely on for deciding to take the material or not. This is unfortunately not possible when it comes to video materials. As a suggestion, it would be interesting to see if patrons will be better served if libraries could be equipped with a means to allow patrons to preview short extract, such as video trailers, of the video collections that they offer. The Internet Movie Database (IMDB³), for instance, provides

³ <http://www.imdb.com/>

videos with description along with trailers to help an individual make a decision on whether to watch a particular video or not. Such a mechanism should not be very difficult to implement as it could take the form of a device with a scanner that would read the barcode present on the cover of a movie, to then automatically search a local database or the IMDB collection, and then play the trailer on a small monitor. Further research is however required to determine the reason for which patrons exhibited visible expressions of frustration when browsing the video collections. Such a study should involve additional hours of observations and the interview or survey of a larger population of library patrons.

CONCLUSIONS

This study could not find any significant differences between the browsing behaviour of patrons when interacting with print materials, websites or video collections. Patterns of behaviour observed when patrons browsed through video collections were seen to be similar to the behaviour reported in previous literature for patrons who interacted with print materials and websites. However compared to browsing behaviour in other settings, it was observed that patrons exhibited frustrations that seemed to affect their ability of choosing a video from the options made available to them. It is suspected that such frustration may be the result of patrons having limited information on which to rely on when it comes to deciding whether a particular video would satisfy their information need. In consequence, this study suggests that further investigation is required to evaluate whether patrons are satisfied with the current service offered by video services in libraries, which at the same time may provide essential information as to how to improve such services.

REFERENCES

- Babbie, E. 2007. *The practice of social research* (11th ed.) Belmont, CA: Wadsworth/Thomson.
- Bates, M. J. 2007. What is browsing—really? A model drawing from behavioural science research. *Information Research*, Vol. 12, no. 4, paper 330. Available at: <http://InformationR.net/ir/12-4/paper330.html>
- Browne, J. 1978. The used car game. In M.P. Golden (ed.), *The research experience*. Itaska, IL: F.E. Peacock Publishers, Inc.
- Canter, D., Rivers, R. and Storrs, G. 1985. Characterizing user navigation through complex data structures. *Behaviour and Information Technology*, Vol. 4, no. 2: 93-102.
- Chiharu, M. 2003. Browsing behaviour in information seeking process: on the basis of observation of information-seeking behaviour in libraries and bookstores. *Library and Information Science*, Vol. 49: 1-31.
- Clark, L., Ting, I.H., Kimble, C., Wright P. and Kudenko, D. 2006. Combining ethnographic and clickstream data to identify user Web browsing strategies. *Information Research*. Vol. 12, no. 2. Available at: <http://informationr.net/ir/11-2/paper249.html>
- Cove, J.F. and Walsh, B.C. 1988. Online text retrieval via browsing. *Information Processing and Management*, Vol. 24, no.1: 31-37.
- Cooper, J., Lewis, R. and Urquhart, C. 2004. Using participant or non-participant observation to explain information behaviour. *Information Research*, Vol. 9, no. 4, paper 184. Available at <http://InformationR.net/ir/9-4/paper184.html>

- Kwasnik, B.H. 1992. A descriptive study of the functional components of browsing. In. J.A. Larson and C. Unger (eds.). *Engineering for Human-Computer Interaction: Proceedings of the IFIP TC2/WG2.7 Working Conference on Engineering for Human-Computer Interaction*, Ellivuori, Finland, 10-14 August 1992. Amsterdam: Elsevier Science Publishers A-18, pp. 191-203.
- O'Connor, B. 1993. Browsing: a framework for seeking functional information. *Knowledge: Creativity, Diffusion, Utilization*, Vol. 15, no. 2: 211-232.
- Pirolli, P. and Card, S. 1999. Information foraging. *Psychological Review*, Vol. 106, no. 4: 643-675.
- Rice, R.E., McCreddie, M. and Chang, S.L. 2001. *Accessing and browsing information and communication*. Cambridge, MA: MIT Press.
- Ridley, D.R., Jones, A.V., Jenkins, E.K., and Gonzales, E.A . 1995. University library browsing: a study illustrating a methodology, *ERIC Document Number ED382193*.
- Toms, E.G. 2000. Understanding and facilitating the browsing of electronic text. *International Journal of Human-Computer Studies*, Vol. 52, no. 3: 423-452.
- Webb, E.J., Campbell, D.T., Schwartz R.D. and Sechrest, L. 1996. Unobtrusive measures: nonreactive research in the social sciences. Chicago, IL.: Rand McNally