The Home Buying Experience: The impacts of time pressure and emotion on High Stakes Deciders Information Behavior

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Abstract

The purpose of this study was to determine how time pressure and emotion influenced people's information behavior when engaging in high stakes decision-making within the home buying domain. Employing an exploratory approach, 33 semi-structured interviews involving a timeline strategy, as well as 8 observations, were conducted with participants from the Seattle, Washington metropolitan area. Findings revealed that "information use" induced emotion, created a sense of time pressure and generated an interaction of the two factors, whereas "non-information use" behaviors such as information needs and information seeking were propelled by emotion and time pressure. The study also identified the emergent "information use by proxy" phenomenon wherein emotion prompted people to enlist trusted surrogates to use information for making decisions on their behalf. Further, findings show that emotion and time pressure have the ability to alter one's routine information behavior to that of a more impulsive or arbitrary approach.

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1 Introduction

Decisions. As we move through our everyday life activities, we make decisions. Many of these decisions are routine, do not involve risk and focus on a single issue; we know what outcomes to expect (Maule & Svenson, 1993b). Choosing not to carry an umbrella or ordering pizza from a favorite restaurant represent such decisions, as they entail little risk and the outcomes are predictable. You may or may not get wet minus an umbrella and the pizza is likely to be comparable to previous pies. Some decisions, however, embody risk along with uncertain outcomes, for example, stock market investments or foregoing a child's vaccinations as earnings and the youngster's health are influenced by future events (Maule & Svenson, 1993b). Kunreuther and colleagues (2002) refer to such decisions as "high stakes." More specifically, the authors indicate that high stakes decisions are characterized by "the existence of large financial and/or emotional loss outcome(s) and the presence of high costs to reversing a decision once it is made" (p. 261). Regardless of the decision type, some decisions inevitably generate information behavior. Moreover, this behavior may be linked to one or more choices and choices are shaped by many factors (Fisher & Julien, 2009). Of specific interest to this inquiry was the factors of time pressure and emotion.

2 Literature review

Literature indicates that decision-making is widespread. Within information behavior, Schamber (1994, 2000) and Barry and Schamber (1998) investigated criteria used to influence relevance judgments. Similarly, Spink, Grisdorf and Bateman (1998, p. 606) examined the "fuzzy, middle region of relevance" to learn that partial relevance is often more useful than highly relevant material as it takes information seekers in new directions. Others have examined the decisions behind selected information sources as part of broader information behavior studies (Casey, Miller, & Johnson, 1997; Kim & Sin, 2007; Landry, 2006; Matthews, Sellergren, Manfredi, & Williams, 2002). Additionally, decision-making studies have a long history in such fields as economics, management science, policy analysis and psychology (Gilboa & Schmeidler, 1995; Kahneman & Tversky, 1979; Lipshitz, Klein, Orasanu, & Salas, 2001; Shafir, Simonson, & Tversky, 1993; Simon, 1967; Simon, 1997; Tversky, 1972).

Emotion, too, has emerged as a noteworthy topic in both information behavior and decision-making literatures. Exemplifying this notion within information behavior is the publication *Information and emotion* (Nahl & Bilal, 2007), which discusses emotion's influence on the information behavior of various populations, contests and cultures. From decision research, literature suggests that people employ emotion as a source of information when making decisions (Finucane, 2008), that emotional cues help us to make the "right" choice (Kunreuther, et al., 2002), and that we would not be able to make good choices without emotional guidance (Bechara, Damasio, Tranel, & Damasio, 1997).

Like emotion, time pressure is recognized as a compelling factor in both information behavior and decision-making. Information behavior theorists suggest that time is a resource and, when in short supply, people limit their information choices to that which can be attained quickly and easily (Savolainen, 2006; Wilson, 1997). *Time pressure and stress in human judgment and decision-making* (Svenson & Maule, 1993) present a persuasive discussion on people's behavior when faced with time constraints associated with decision-making. For example, deciders may trade effort for accuracy when working under time pressure (Busemeyer, 1993).

Although literature shows that researchers have examined the influence of emotion on information behavior, and literature has discussed the notion of time pressure (cf.Nahl, 2004; Savolainen, 2006; Wilson, 1997), there is scant evidence that the interaction of these two elements has been explored, particularly with a focus toward high stakes decision making. This study was motivated by the absence of research addressing this phenomenon on high stakes deciders' information behavior.

3 Current Study

To investigate the impact of time pressure and emotion on the information behavior of high stakes deciders, two complementary theoretical frameworks were employed: Chatman's (2000) Theory of Normative Behavior and Fisher's (2004) Information Grounds. Moreover, the study was guided by the following questions:

- 1. To what extent does the interaction of time pressure and emotion influence people's information behavior when engaged in high stakes decision-making?
- 2. How do high stakes decision makers experience information when the decision is made under time pressure?
- 3. How do high stakes decision makers experience information when a decision is emotionally charged?

3.1 Domain of Inquiry

We buy homes for many reasons, for example, the need for a starter home, trading up or downsizing, as an investment, or relocating for a job. The average time a homeowner stays in his or her home is 13 years (Anily, Hornik, & Israeli, 1999), which makes buying a home a common occurrence. Furthermore, buying a house is a complex process. Numerous stages present including but not limited to looking for a lender, obtaining financing, finding a real estate agent, shopping for a house, making an offer, arranging inspections, signing a contract, and closing the deal. Closely associated with the process are such stakeholders as lenders, real estate agents, home inspectors, escrow agents, title insurance purveyors and attorneys. Moreover, buying a home is likely the largest investment many people will make in their lifetimes and, as such, deciding to buy a home is high stakes from a financial perspective. Thus, home buying represented a multifaceted domain involving a changing market place, a complex process and various stakeholders. Given these disparate factors, the home buying domain characterized an intriguing area of study.

3.2 Participants

To learn about the phenomena under study, a purposive sampling of twenty-two homebuyers and sixteen home buying stakeholders were recruited from the Seattle, WA metropolitan area. Study criteria mandated that participants be at least 18 years of age and that they bought a home or helped someone to buy a home within the previous six months. Data were collected from April 2012 through March 2013. Interviews were audio recorded for transcription and analysis.

3.3 Semi-structured Interviews Employing a Timeline Approach

Thirty-three interviews employing a timeline approach were conducted with homebuyers and home buying stakeholders. Interviews allowed the researcher and the participants to reconstruct the past while expressing their thoughts, feelings and opinions regarding their home buying experiences. To address data quality concerns related to a participant's self-report, a timeline approach was incorporated into the interview protocol. A timeline serves to "establish a shared awareness of the 'facts of the case'" from the participant's perspective (Klein, Calderwood, & MacGregor, 1989, p. 466) while detailing the step-by-step nature of a situation (Dervin, 2003). In addition, a timeline acts as an event history calendar as it relies on "thematic and temporal" information, which was key to obtaining high quality autobiographical data (Belli, 1998, p. 385). Interview protocols were tested for question clarity and timeline effectiveness. The timeline

approach established its value by resurrecting home buying memories along with their attendant emotions, feelings of time pressure, instances of information behavior and decision making.

3.4 Observations

As observations allow researchers to collect firsthand, open-ended information about people and places with in the context of their situations (Creswell, 2005), this methodology was incorporated into the study design. Eight observations were conducted with four real estate agents including one open house, two property showings, one initial client meeting and four home buying classes. Observations noted what was said during information exchanges, how it was said, whether one information activity engendered others, how people reacted to information and how effectively documents or technology facilitated information activities. Moreover, observation of body language, tone of voice and nonverbal language were implemented for evidence of emotion and time stress as participants moved through their activities and interactions with others. An observation checklist was created and tested to evaluate its guidelines for identifying information activities, as well as instances of emotion and time pressure while observing real estate agents interacting with clients.

3.5 Data Analysis

In this qualitative study, data analysis was inseparable from data collection since analysis began with the initial data collection event, as well as occurring between data gathering episodes and during the "data analysis" component of the research project (Erlandson, Harris, Skipper, & Allen, 1993). Miles and Huberman's (1994) iterative pattern coding provided the analysis methodology. A codebook was developed and submitted for intercoder reliability testing. Moreover, Shaver and colleagues (2001) model of emotion clusters, a dictionary and thesaurus were employed to define emotion codes.

4 Findings

4.1 Emotion and Information Behavior

Emotion is relevant to information behavior (Fisher & Landry, 2007; Kuhlthau, 1988; Nahl, 2007; Wilson & Walsh, 1996), and it was no less significant to the participants in this study. To learn about emotion, participants were asked to discuss their decisions, disclose their feelings and reveal how feelings affected their ability to find what they needed. Data analysis identified eight information behaviors and nineteen emotions (Figure 1). Using information presented as the most prevalent information behavior linked with high stakes deciding. Furthermore, information use accompanied such paralleling emotions as joy, fear, love, hate and sadness. "Non-information use" behaviors like information sharing, information-seeking and information need were less prevailing with fear and anger the predominant emotions felt in each category. Remaining information behaviors exhibited nominal occurrences along with the attendant emotions of trust and anger.

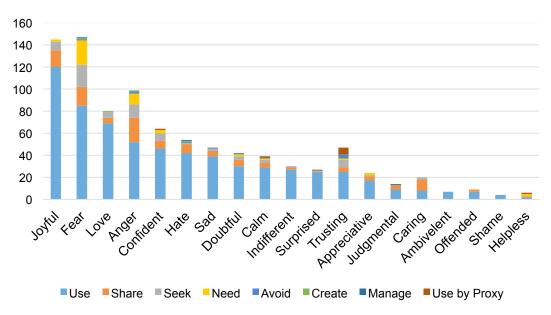


Figure 1. Instances of Co-occurring Information Behavior and Emotion

4.2 Time Pressure and Information Behavior

Like emotion, time pressure is a notable concept in the field of information behavior (Berryman, 2006; Savolainen, 2006; Wilson, 1997). As such, the study examined how time pressure affected the information behavior of high stakes deciders by asking participants to discuss decisions, indicate whether time was a factor and tell how time influenced their abilities to find what they needed. Interview and observational data revealed that homebuyers felt the greatest sense of time pressure in conjunction with information use (Figure 2).

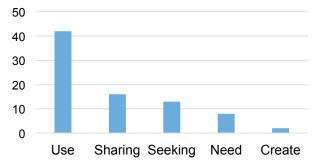


Figure 2. Instances of Co-occurring Time pressure and Information Behavior

4.3 The Interaction of Time Pressure and Emotion on Information Behavior

Individually, emotion and time pressure affected the information behavior of high stakes deciders. However, to learn how the interaction of time pressure and emotion shaped information behavior, participants were asked to discuss their home buying decisions and disclose how the combination of time urgency and their feelings influenced their ability to get what they needed. Participants revealed that the interaction of time pressure and emotion was a factor with regard to information behavior. Analysis of interview data distinguished five discrete information behaviors and fourteen emotions associated with high stakes decisions (Figure 3). Of these, information use presented as the dominant behavior and fear showed as the prevailing emotion.

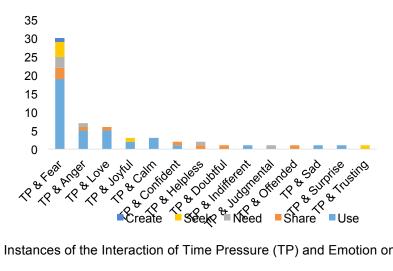


Figure 3. Instances of the Interaction of Time Pressure (TP) and Emotion on Information Behavior

4.4 How Information Use affects High Stakes Decision Makers

As noted above, information behavior encompasses many facets such as information needs, seeking, sharing, etc.; moreover, associations can be drawn between the various forms of behavior and emotion or time pressure (Case, 2005; Julien & Michels, 2004; Nahl, 2004; Nahl & Bilal, 2007). Given these connections, it is notable then that the relationship between information use, emotion, time pressure as well as the interaction of both characteristics diverges from other information behaviors. When asked about their home buying experiences, high stakes deciders indicated that information use stimulated emotion, created time pressure and generated the interaction of time pressure and emotion.

With regard to emotion and information use, for example, a 36 year old repeat homebuyer felt joyfulness while viewing a property. She explained:

When you walked in the top-level, there was this big wrap around deck and kind of a peekaboo view of Puget Sound, which was really awesome. And then it has this funky 70s hanging fireplace in the living room which, it was just pretty cool...the view was great...if we redid the kitchen and knocked down the wall between the kitchen and the living room, you could see all the way out to the Sound. And we had this vision of having this cool open living room and this cool kitchen where you could see the water.

Conversely, this first time homebuyer felt disappointed after learning that he had not qualified for a 203 K renovation loan, as it "meant that we're going to have to pay steeper mortgage insurance for a longer period of time."

Like homebuyers, information use generated emotion for stakeholders as was the case when a homebuyer contacted a real estate agent and informed her that "I remember meeting you at this home so long ago...I had a great experience meeting you, and I would like to work with you." When asked how she felt about receiving such news, the agent replied, "It's the best call of your week. It is not just for the financial part, but it is really nice when someone remembers you and feels like they had a good experience...It's really nice." Whereas surprise was the reaction felt by an agent after learning that a home's appraisal came in \$15,000 less than the accepted offer. Given her 12 years of experience, she stated "That was a shocker to me...I didn't expect that. There's no way!"

In a manner similar to emotion, information use created a sense of time urgency for high stakes deciders. For instance, a 30 year old first time homebuyer felt pressured to submit an offer on a house after learning "there were two other offers and the sellers were looking at them the next morning. So, we had to make a decision that evening." For this home buying investor and a real estate agent, self-imposed time pressure presented after viewing a condominium which was determined a "good deal." and he "decided there and then to go back home, draft it up," and make the offer the very same day.

Although less common than the stimulation of emotion or the creation of time pressure, the interaction of these two elements was correspondingly significant. A real estate agent with 4 ½ years in the business expressed anger while simultaneously experiencing a time pressure situation when using the information that her clients found a house that "had actually just come on the market and there was at least one other offer." The agent was compelled to write their offer quickly during which she

acknowledged that "it can be really stressful for me. Real estate doesn't care about things like putting your son to bed or showing up at your mother's birthday party or whether or not you've already put in a 14 hour day and you haven't seen your husband for three days." In a like manner, this repeat homebuyer exclaimed "Holy cow! This is actually everything we've looked for, and we didn't anticipate it being this good." Information about the property triggered her love for the house as well as generating "immediate time pressure, since she thought "there's got to be other offers on it…we need to contact them now and put in an offer

4.5 Compelling Influence Behind non-Information Use Behavior

Unlike information use, a substantially different effect presented when non-information use behaviors were involved during high stakes decision-making. In such instances, emotion and time pressure propelled or motivated one's non-use behavior. Illustrative of this phenomenon was the frustration suffered by a 50 year old repeat homebuyer regarding the features in his current home, which in turn empowered him to create "a top ten list of things that...we were really looking for in a house." However, a mortgage lender felt nervous concerning his need for information from underwriters as "once you get to final underwriting there are additional conditions needed, so we may need another pay stub or explanation. What if there is something I missed in my write-up?" On the other hand, one homebuyer's sense of panic influenced his information management as he explained that "for many estimates, contracts, permits, etc., we ended up piling them on any number of flat surfaces in our houses. Every couple of weeks or more, I would freak out that I didn't know where everything was, then go through the piles and try to group things together by type."

Time pressure, like emotion, similarly compelled high stakes deciders' information behavior. For instance, an escrow agent articulated how time pressure prompted her creation of a document for a client traveling outside the country:

Preparing a quitclaim deed for people that are standing by waiting for legal documents out of the country, that creates time pressure [because] you have somebody standing by a computer waiting for the document to be prepared...it is a matter of being in this chair at that computer at that moment to get that created for them.

Time pressure, too, provoked an urgent need of information for mortgage lenders. For example, one lender needed a client's documentation "by tomorrow in order to get you through your contract." In the same way, information sharing was driven by time pressure as this real estate agent's situation illustrates. "Time is of the essence as it is crucial to get a client's contract to pending, therefore, important documents must be sent to the listing agent and the managing broker: You have to email or fax it to two places. You just want to get it done within the hour as much as possible."

A less common but equally significant factor guiding participants' information behavior was the interaction of time pressure and emotion. Like the stand-alone attributes of emotion and time pressure, the interaction of both factors motivated high stakes deciders' need for information as well as how they sought, shared and created information. Evidence of such impact came from one homebuyer who experienced both anxiety and a strong sense of helplessness in his urgent need for information combined with the pressing requirement to share information. He explained that his situation revolved around such life events as defending his doctoral dissertation, attaining a PhD and transitioning to a higher pay scale while simultaneously buying a home. More specifically, the homebuyer had to share information showing that he earned doctorate level income rather than the pay of a graduate student. Because of this requirement, a cascade of time sensitive behaviors was set in motion, beginning with the need for feedback on his dissertation:

I was expecting to get all of my feedback on the written part of my dissertation on the same day [Friday], and then to make corrections and then submit all of that to the grad school...but one of the people from my reading committee didn't give me comments until Sunday. He looked through all that [corrections] and I think got back to me on Tuesday.

In this instance, the homebuyer's urgent need for information along with the obligation to share information engendered feelings of anxiety as one behavior was dependent on the other. Moreover, the emotions he experienced during this time sensitive process left him feeling helpless since "I just didn't have any control of the situation...I needed everything done by a certain amount of time, but I didn't see anything that I could do to speed up the process." With reference to information-seeking, this homebuyer

suffered the interaction of time pressure and worry as her apartment lease was soon to expire. Consequently, she was motivated to ask her landlord about extending the current lease: "I was just too worried about trying to get moved in a three day period...so I emailed our landlord."

4.6 The role of Information Use by Proxy

High stakes decision makers have demonstrated their inclination to engage in various forms of information behavior during their home buying experiences. A few participants, however, revealed an additional behavior in which they elected to forgo their information responsibilities and enlist trusted surrogates to use information to make decisions on their behalf or "information use by proxy" (Figure 1). Moreover, emotion played a key role in homebuyers deferring their information use to others. This 24 year old first time buyer exemplifies the phenomenon, for example, trust factored into obtaining a mortgage. As the homebuyer explained, "I didn't understand half of what she [mortgage lender] was telling me. I just went along with it. So, it probably isn't the smartest idea, but I felt that's what she did for a living, so I would trust her." Another first time buyer deferred to her real estate agent when determining the proper amount to offer "because I didn't have too much say in it. I just trusted her." As a first time homebuyer, this 60 year old experienced multiple emotions which precipitated his information use by proxy behavior. Once the buyer made the decision to buy a house, he worried that "I'm going to find some slick realtor who is going to talk me into something I don't want and can't afford." Furthermore, he feared that people would take advantage of him given his home buying naiveté, "like when somebody is foundering in the ocean, the sharks start circling." Consequently, the homebuyer turned to a trusted cousin. He implored his cousin to "tell me the offer...tell me exactly what to say, and I said exactly what she told me to say." As indicated by these examples, information use by proxy represented an important information behavior for some high stakes deciders.

Proxy studies are not new to information science as previous inquiries have examined the notion of lay information mediaries or seeking information for the benefit of others (Abrahamson & Fisher, 2007; Abrahamson, Fisher, Turner, Durrance, & Turner, 2008). Typically, these lay information mediaries seek information with or without being asked and tend to do so for people they care about. A representative scenario of such behavior would be finding diabetes information for a parent. Research has also found that proxies seek information on behalf of strangers, for example, helping a fellow library patron find a flight to his or her desired destination (Becker et al., 2010). Information use by proxy, however, is an emergent and novel concept within information science.

Although findings tie information use by proxy to emotion, it is worth noting that the behavior may similarly present when experiencing time pressure, as information use by proxy may be viewed as a time saving strategy such as delegating a responsibility or task. In such an instance, the stakeholder surfaces as an important surrogate during the home buying process.

4.7 Altering Information Behavior

Study findings further suggest that time pressure and emotion have the capacity to "alter" participants' information behavior, however, instances of emotion presented as the most common influence in behavior modification.

Illustrating this phenomenon was a 25 year old homebuyer, who took responsibility for information seeking and sharing during her initial home buying experience that ended unfavorably. For her, this negative outcome was demoralizing, and thus prompted a change in home buying information behavior. With the next home buying attempt, she elected to avoid information by shifting all information-seeking, sharing and managing responsibilities to her husband. The homebuyer stated that "Yes, I let my husband do it all. I obviously was ccd on emails, but I'd get an email and I'd vaguely read it and I'd push it aside because I knew that he was going to take care of it." A young couple new to the Seattle area experienced a similar shift in information behavior after the offer on a fifth home was rejected. The wife explained that she was devastated. "I was like. 'Oh my gosh, not another one! Oh my gosh, it's hopeless!" Given such feelings of despair and hopelessness, she temporarily avoided further home buying information: "I refused to look." Conversely, the 60 year old first time homebuyer progressed from employing information use by proxy to using information by and for himself. He ascribed this change in behavior to having gained experience and developing feelings of confidence from his initial home buying attempt. Thus, when a later home buying opportunity arose, the buyer used what he had learned, asserting that "I felt good because I wasn't just grabbing a number. I had something to rely on, past experience. And I was getting more self-confident...I was getting smarter."

Time pressure similarly altered information behavior, as time did not always permit participants to act in an expected manner. For example, this homebuyer needed information regarding the condition of a

house, and her predictable behavior was to seek such information by way of a home inspection. However, she altered her behavior and waived the need as a two-day deadline to accept a seller's offer precluded sufficient time for an inspection to occur. Similarly, this real estate agent changed her method of information sharing due to time pressure. She explained that

We wrote the contract differently these other times. Previously we had actually met face to face to get paperwork done, but in this case we would have done everything by fax and email because there wasn't that opportunity. We're in such a tight deadline that we had to get things done guickly. There wasn't time to meet.

As with the stand-alone elements of emotion and time pressure, the interaction of these two factors also had the ability to alter information behavior. Such was the case for a first time homebuyer who described the collision of time pressure and emotion as "horrible," as she was forced to relinquish systematic control of her information behavior. In this instance, the homebuyer had 30 minutes to decide whether to make an offer on a home as well as determining the amount to offer. She described her situation:

I am very methodical...I research every angle. I look into everything and I need to have time to really look at everything. And so it felt just awful. Finally, I just had to go against my nature and say, 'Let's just do this. I'm going to throw caution to the wind. There's only one way we can do this, and I'm going to have faith that it will work out somehow.' But it was totally against my nature to do something like that.

It is worth noting that the alteration of one's information behavior is reflective of Papadopoulou, Lee and Fisher's (2013) notion of a couple's shared information behavior. The six concepts of context, seeking, storing, managing, sharing and barriers presented in the authors' Model of Dyadic Information Behavior apply to some homebuyers, for example, the female who shifted home buying information responsibility to her husband after receiving the devastating news that a highly sought after home was lost to them. This backdrop constitutes the context delineated in the model. Seeking, storing, managing, and sharing behaviors were assumed by the husband, while negative emotion comprised the barrier experienced by the wife. Further, this shared dyadic information behavior has implications that extend beyond couples in intimate relationships to those relationships found in the business world, academia, artistic endeavors or other dyadic collaborations.

5 Conclusion

As an exploratory study, this inquiry aimed to increase the understanding of time pressure and emotion's influence on the information behavior of high stakes decision makers. Findings disclosed that information use presented as the dominant information behavior. Moreover, using information induced emotion, created a sense of time pressure and generated the interaction of these two factors. Despite this predominance, information use was not a standalone behavior as participants also engaged in non-information use behaviors such as seeking, sharing or needing information. Unlike information use, however, non-information use behavior was propelled by emotion, time pressure and the interaction of the two elements. Thus, emotion and time pressure created a notable divergence between information use and non-information use behaviors.

Additionally, the study identified two specific behaviors associated with information, time pressure and emotion: the emergent theme of information use by proxy and the altering of one's typical information behavior. Firstly, participants employed information use by proxy when emotions such as trust or fear prompted high stakes deciders to engage trusted family members or principled professionals to use information for making decisions on their behalf. Secondly, characteristic information behavior could be altered by the presence of time pressure or emotion, such as emotions like despair shifting active information use to that of avoidance or time pressure changing methodical information seeking and use to be abandoned in favor of a more impulsive or arbitrary approach.

There is still more to learn about the impact of time pressure and emotion on the information behavior as high stakes deciding occurs in many domains, for example, medical, military or financial arenas. However, the insights arising from this study bring potential benefits to the field, as systems can be developed to assist people's information behavior when decisions are emotionally charged or when deciders are compelled to make choices under severe time stress.

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