

PROUD TO BE IN CONTROL: UNDERSTANDING CONCERN CONFLICTS AND INITIAL PRINCIPLES FOR CONFLICT-INSPIRED DESIGN APPROACHES

Deger Ozkaramanli, Pieter M. A. Desmet, Paul Hekkert.
TuDelft
d.ozkaramanli@tudelft.nl

ABSTRACT

The purpose of this paper is to increase our understanding of how insights in conflicting concerns can be used as an approach to design for subjective well-being. This is done through examining qualities of a conflict experience across three life domains: food, procrastination, and safe sex. Ten participants from various age groups and backgrounds volunteered for a two-week diary study followed by in-depth interviews. Our findings indicated that there are three layers to a conflict experience: (1) mutually exclusive action alternatives, (2) immediacy of concerns, and (3) elicited mixed emotions. Interaction among these layers revealed three variables that influence people's choices between two mutually exclusive action alternatives, namely size of the hurdle, awareness of potential costs and gains, and vividness of concerns. Our findings also include individual strategies that people use to deal with conflicting experiences. These strategies inspired three initial principles for designing products that can motivate people to prioritise meaningful goals, fulfilment of which can lead to sustained happiness.

Keywords: concern, conflict, well-being, meaningful goals

INTRODUCTION

"I have to consider both sides of the equation," "you should also consider the other side of the coin," "he needs to rethink his priorities": these are some expressions we use when facing events in which there is more than one *concern at stake*. In these events, our concerns often seem to conflict. For example, we

may want to show our best selves to increase our chance for a promotion (concern of success), yet we also want to remain modest because we do not like to be perceived as being arrogant (concern of social acceptance). Or we may decide to skip our gym-night to go to the movies (concern of entertainment), and yet, wish we would have a fine-looking body like the movie stars we admire (concern of being attractive).

Our interactions with products also play a role in the experience of conflicts. They may support our strategies for resolving our conflicts, or they may impede with these strategies, and thus taking the centre-stage in perpetuating the conflict. For example, a weekly subscription for fruits and vegetables at the local grocery store contributes to a healthier life-style, even if one does not have much time to go shopping; while buying yet another pair of expensive shoes can be difficult to justify because you were actually trying to save money to buy your mother a nice present.

Despite not being obvious when we are taken over by the immediacy of emotions such as desire or anxiety, we eventually realise that we cannot afford to do what only works for the present moment. Otherwise, why would we rush to the grocery store for dinner supplies before it closes or even attempt to justify buying a new pair of shoes? This realisation forms the root of a conflict experience, and it can work either to enhance or to harm our well-being. As cited in Emmons and King (1988, p.1040), "*Paradoxically the same conflict that can result in the realization of untapped potential (Turiel, 1974), can also result in much emotional distress*" What we hope to achieve in this paper is to understand and exemplify the potential of conflict experiences in motivating people for change, rather

than dwelling on their negative effects on our well-being.

Previous research demonstrated the inspiring nature of using concern conflicts to design for subjective well-being, and suggested that this approach can be helpful in addressing many individual and societal conflicts ranging from obesity to sustainable behaviour (Ozkaramanli and Desmet, 2012). Moreover, this research provided a theoretical background for understanding conflicting concerns based on appraisal theory and previous research on designing for product emotions. However, the findings were limited to a single design domain, which makes it challenging to grasp a holistic view of a conflict experience.

In this paper, we want to take this understanding further by focusing on intra-individual conflicts in three different life domains. The main goal is to clarify and expand the essence of conflict experiences. This practical understanding should provide us with insights that can inspire initial design principles for designing conflict-inspired products.

CONCERN CONFLICTS

In emotion psychology the word ‘concern’ is used as a collective term to describe our goals, standards, and attitudes that govern our interactions in daily life (e.g. Frijda, 1986). We get emotional about events only when this event touches upon one or more of our concerns. A positive emotion is generated when the event matches with one or more of our concerns, and a negative emotion is evoked in case of a mismatch. For example, I would feel proud of myself if I can prepare a delicious dinner following a recipe from my new cooking book (fulfilling the goal of “I want to be a good cook” and the attitude of “I enjoy tasty food”). However, I would be frustrated with a new kitchen knife that turns out to be blunt the first time it is being used, because a new knife should simply be sharp (violation of a standard). In this way, emotions guard our concerns; they direct our attention to the object of emotion, stimulating us to act in a way that minimises momentary losses and maximises gains. For example, fear prepares us to flee to minimise the chance of harm; and desire prepares us to approach to maximise the chance of satisfaction.

Emotional concern conflicts can arise when a stimulus event matches one concern and mismatches another: making fun of a colleague may provide enjoyment (concern for pleasure), but it comes at the cost of the relationship with this colleague (concern for respect). Conflicts can also arise when the same event matches only momentary concerns, because we are also aware that the event has future consequences that can harm our concerns on the long-term. For example, spending the weekends on writing scientific papers may provide inspiration and success, while costing relationships with people who are neglected by the scientist on the long-term.

The apparent reality is that we do not always act in ways that minimise future losses and maximise future gains. What makes us eat that chocolate cake even when on a strict diet, or spend an hour on cleaning the desk before finally getting to work? The motivational power of our concerns can only be voiced through the emotions they underlie, which can lead to impulsive as well as reflective behaviour: *“Ultimately, and crucially, people learn to anticipate emotional outcomes and behave so as to pursue the emotions they prefer.”* (Baumeister, Vohs, DeWall, and Zhang, 2008, p.168). Therefore, we will adopt an emotion-driven approach to reconcile conflicting concerns. For this, we will address emotions that cause impulsive behaviour by using emotions that motivate reflective behaviour through empowering freewill and self-control (e.g. hope). In other words, we have an emotional solution to an emotional problem: we will fight fire with fire.

The challenge here is that emotions evoked by real stimuli (desire towards a piece of soft and creamy chocolate cake, or frustration with a big mess on one’s desk) are experienced more vividly than emotions that are anticipated, such as the sadness associated with the anticipated consequences of neglecting loved ones. Frijda (2010, p.70) points out the following: *“Although impulsive action is automatically triggered by stimulus events, complications in obeying passions easily arise... Facing an event that makes a person want more than one thing at the same time... A single event is appraised as touching upon more than one concern, and activates more than one emotional aim. In everyday life, this is the rule rather than the*

exception. Arousal of impulsive action hits the obstacle of conflict between emotional goals."

As a result, it becomes a fierce battle to act on emotion anticipations instead of acting on vivid emotions to remain true to our meaningful goals. Losing weight and the satisfaction/pride associated with it is far ahead, while the chocolate cake is right there and ready to be tasted. This brings up the need to find a balance between actions that are driven by meaning-focused versus pleasure-focused concerns. Therefore, we need to understand how our emotions and their underlying concerns get prioritized to bring about goal-directed behaviour. Only then, we can use this understanding to develop principles for designs that can optimize meaningful goal engagement.

METHODOLOGY

We conducted a phenomenological study in which we focused on intra-individual conflicts to gain a deeper understanding of subjective experience of the conflict phenomenon. Three life domains were explored in this study: (1) food, (2) procrastination, and (3) safe sex. These domains were hypothesised to be fruitful from the perspective of conflicting concerns as there are contradictions involved in each such as ensuring health and well-being versus giving into immediate temptations or obligations. The selection of these three distinct domains is neither exhaustive nor is it too limited, which fits the exploratory purposes of this study. The study can be defined as a phenomenological study, since we focused on the 'lived experience' of conflicts in everyday life and relied on the subjective experiences of a limited number of participants based on self-reports. The main research questions are:

- What motivates people to persist or give up on personally meaningful goals in the experience of concern conflicts?
- What discrete emotions dominate the experience of concern conflicts?

To answer the above research questions, a four-week study was conducted with ten participants (five male,

five female), who were selected to be from different age groups (between 21 and 59 years old). The participants were recruited on a voluntary basis, and received a stationary gift for their participation. All participants were Dutch, except for one Portuguese, one German, and one Chinese participant.

Participants received a booklet to be completed over two weeks followed by an in-depth interview. The booklets served as sensitising material for the participants, increasing their commitment to the study (Sleeswijk Visser et al., 2005). Additionally, the content of the booklets served as input to be further detailed during the interview.

The booklet started with an introductory exercise and a confidentiality statement. Next, the participants were asked to report their 'personally meaningful life goals' related to three domains of study. On the following days, participants completed nine exercises (three in each domain), each of which was composed of questions that asked for a stimulus event, resulting emotions, and the concerns behind these emotions. To avoid directive examples, questions were phrased around a hypothetical conflict experience such as *"Sometimes we eat or drink foods that we think we should not have. Can you think of a recent situation that you ate or drank something you should not have?"* Example emotion words or clues were avoided for the same reason. Where appropriate, the participants were asked how they acted on the emotions they experienced following the stimulus event to examine whether the conflict experience encouraged behaviour that could resolve or perpetuate the conflict. The questions were not centred on human-product interaction to maintain a holistic view of the phenomenon; however, the behavioural aspect of the reported experiences was expected to reveal insights on the involvement of products. Figures 1 and 2 show example exercises that demonstrate the general structure of the booklet.



Sometimes we eat or drink foods that we think we should not have. Can you remember a time in the past week that you ate or drank something that you thought you should not have? If so, please explain what it was, when, where, with whom you had it.

.....
.....
.....

Did you experience any emotions before, during or after you had this food? If so, name them below.

	pleasant emotion(s) +	unpleasant emotion(s) -
before eating		
during eating		
after eating		

Pick the strongest pleasant and unpleasant emotion you experienced and explain why you felt that way.

I felt.....(strong pleasant emotion) because.....

I felt.....(strong unpleasant emotion) because.....

Did you think or do anything in response to your emotions after eating? If so, what did you think or do?

.....
.....
.....

Figure 1. Example exercise in the food domain



We may be aware of the importance of having safe sex, but sometimes we tend to forget or ignore it in the spur of the moment. Do you remember such a situation when you took a risk with your partner? What happened?

.....
.....
.....

Did you experience any emotions before, or after the situation? If so, please name them below.

	pleasant emotion(s) +	unpleasant emotion(s) -
before decision		
after decision		

Pick the strongest pleasant and unpleasant emotion you experienced and explain why you felt that way.

I felt.....(strong pleasant emotion) because.....

I felt.....(strong unpleasant emotion) because.....

Did you think or do anything in response to your emotions after your decision? If so, what did you think or do?

.....
.....

Figure 2. Example exercise in the domain of safe sex

The next step was to interview each participant to vitalize the experiences shared through the booklets. Interviews form the main source of data in phenomenological research, and need to be conducted in “an informal, open, and interactive” way (Moustakas, 1994, p.114).

Each interview lasted forty-five minutes to one hour and was conducted by the first author in a setting that was natural to the participant (home or study environment). The interview started with a brief introduction and discussion of the ‘personally meaningful life goals’ related to the three domains of interest. The main goal here was to relax the participant and to create a trustworthy atmosphere. Next, the interviewer and the participant discussed each exercise. As the questions in the booklet were answered in 1-2 sentences only, the interviewer took ample time in asking about the constituents of the experience such as how it felt, what the person thought, how she acted, what she said, etcetera. Moreover, the interviewer focused on emotional stories that seemed most insightful based on one or more of the following points: (1) emotional stories that were closely connected to the meaningful life goals, (2) stories of emotional conflicts that the participant seemed to experience repetitively or intensely, and (3) emotional stories that seemed to trigger a strategy to help prioritize among conflicting concerns.

FINDINGS

All interviews were voice-recorded and fully transcribed. Descriptions from the booklets were also added to the transcripts. The data was reviewed to form 59 cards with direct quotes from users (5-6 sentences).

The cards were later analysed by two researchers in collaboration (the first and the second author) based on the steps detailed by Hycner (1985): (1) going over the raw data giving unbiased attention to the structure and meaning of the ‘conflict’ phenomenon, while suspending researcher’s meanings and interpretations (phenomenological reduction and bracketing), (2) defining units of general and relevant meaning, (3) eliminating redundancies, (4) clustering and defining themes. As a result, 59 cards with direct quotes were reduced down to 41 story cards. Each story was

composed of an explanation of the conflict experience together with a personal strategy (if any) that the participant used to resolve the conflict.

The experience of concern conflicts can be structured using three layers: (1) mutually exclusive action alternatives, (2) immediacy of concerns, and (3) mixed emotions. Additionally, the personal strategies were clustered around four main themes: (1) concretizing distant goals by consciously creating sub-goals, (2) making distant goals easier to pursue, (3) making distant goals more ‘fun’ to pursue, and (4) pursuing goals for/with other people.

THREE LAYERS OF THE CONFLICT EXPERIENCE

Alternatives of action

The example conflicts identified in the study always involved an emotional tag-of-war between two or more action alternatives, which were mutually exclusive (see Figure 3). For example, if one needs to finish his homework but is tempted to practice playing the guitar instead, he has to make a choice: it is not possible to simultaneously do homework and play the guitar. Note that, not engaging in an activity is also a choice. For example, halfway through a cocktail party one can either continue or stop drinking alcoholic beverages.



Figure 3. Examples of mutually exclusive action alternatives

Immediate and distant concerns

Ortony, Clore, and Collins (1988) proposed that people have abstract goals, which are better characterized as aspirations, general, or distant concerns (e.g. have the ideal job), and, at a lower level, more concrete or immediate concerns (e.g. to be admitted to my preferred university). Distant and immediate concerns are related. For example, being productive while working on an assignment is an immediate concern that is associated with the general goal of being successful, see Figure 4.

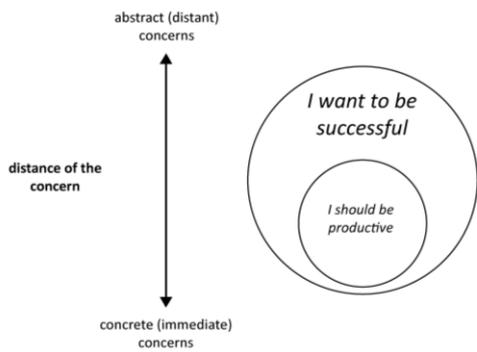


Figure 4. Example of an immediate (concrete) and a distant (abstract) concern

When we combine Figure 3 and Figure 4, we can visualise the role of concerns in instances of conflict, see Figure 5. In this example, the participant said that he chose to distract himself by playing the guitar, while he was supposed to be working on his paper to ensure success. His decision to play the guitar is visualised with the arrow to the right, and the alternative decision (to work on the paper instead) is visualised with the dashed-arrow to the left. Going right satisfies the ‘hot’ concern of enjoying fun distractions at the cost of the ‘cold’ concern of being successful. Hotness of the concern can be defined as the desirability of the action that is required for its fulfilment (Ortony et al., 1988).

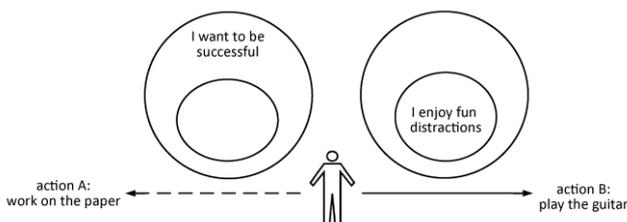


Figure 5. Example of a conflict between a cold (left bubble) and a hot (right bubble) concern and associated action alternatives

Mixed emotions

The above scenario is not complete without the emotions associated with the given concerns: the participant mentioned that he experienced guilt for delaying his work, while he experienced joy and relaxation for practicing with his guitar: “My guitar is a big distraction when I am working at home, I feel more and more guilty over time for postponing my assignment, but then I think ‘I can still make it’ and I get distracted.” We can hypothesise that if he did work on his paper despite the tempting distraction of his guitar; he would have felt proud and perhaps also bored. These emotions are added in Figure 6.

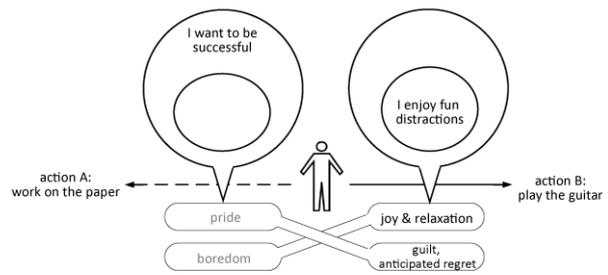


Figure 6. Example of a conflict between a cold and a hot concern, associated action alternatives and elicited mixed emotions

To further our understanding, let’s consider a similar example from the domain of food (Figure 7), in which the participant mentioned that he felt guilty for finishing a pack of cheese-chips right before having dinner with his friends: “I feel a bit guilty before even starting to eat them. I know I am not going to be able to control myself. And regret comes afterwards, when I have a stomach ache and cannot finish the dinner I just prepared.”

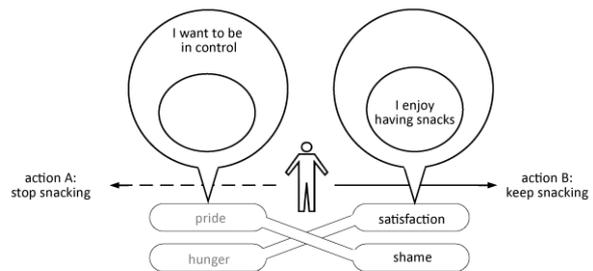


Figure 7. Example of a conflict between a cold and a hot concern

The examples given so far demonstrated a conflict between an immediate and a distant concern, explaining situations in which immediate gains were favoured despite distant costs. However, a conflict can also be experienced between two immediate concerns that imply a trade-off between immediate gains and costs. For example, one participant mentioned she could not ask her friend to use a condom, because it was a close friend whom she knew for years; and thus, she felt uncomfortable bringing the subject up: “I did not want to insist for him to use a condom. He was my friend but I had no idea whom he sleeps with. But because he was a friend, it was more difficult to show mistrust.” In this example, the participant had to choose between two actions, both of which came with an immediate cost, see Figure 8.

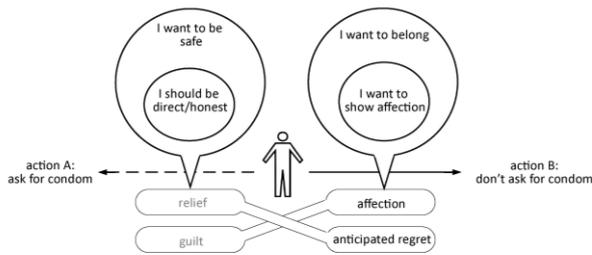


Figure 8. Example of a conflict between two hot concerns

PERSONAL STRATEGIES

Below we discuss different types of personal strategies that the participants use in order to reconcile conflicting concerns.

Creating sub-goals

Abstract goals, such as physical well-being or competence, can be too distant to work towards during daily life. For this reason, seven instances were mentioned in which participants tried to make distant goals more concrete by consciously dividing them into sub-goals that fit their everyday routines. Three out of these seven instances referred to strategies that were successfully carried out.

For example, one participant said, *“I like relaxing with wine in the evenings, but when I drink too much I feel stupid. So I told myself that I should stop drinking right after dinner, at dessert time.”*

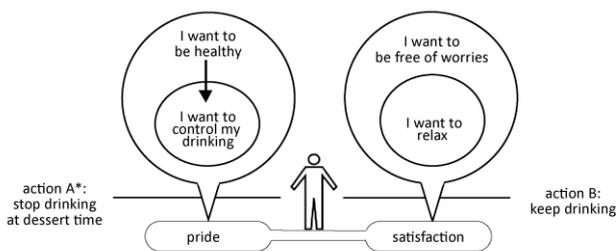


Figure 9. Example strategy (*) to make distant goals more concrete

Making distant goals easier to pursue

Nine instances were mentioned in which participants tried to make distant goals easier to achieve either by making the goal more accessible or trying to stay away from temptations that would hinder goal progress. For example, one participant mentioned that she leaves work-related textbooks in her bedroom, so that she can read for a while before going to bed: *“I am always concerned with time, so I try to put a bit of work in my bedroom.”* Additionally, several

participants mentioned that they do not buy unhealthy snacks or beers to keep at home so that they do not get tempted to eat them all at once, see Figure 9.

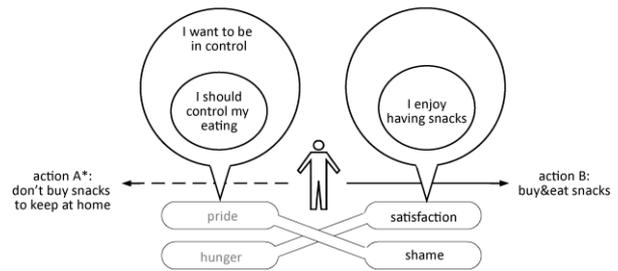


Figure 9. Example strategy (*) to make distant goals easier to pursue

Making distant goals more ‘fun’ to pursue

Although only three participants mentioned this strategy, it is worth to exemplify it since all three instances were successfully carried out. For example, one participant mentioned that he tries to find a balance between spending his free time in a pleasant way, while fulfilling his responsibilities for his language class: *“Getting started on my homework is the most difficult part for me. Therefore, I put some music and prepare some tea to make me happy. Once I start, the music may stop at some point, but I continue working.”*

Pursuing distant goals for/with other people

Fourteen instances were mentioned in which participants used other people as a control mechanism to facilitate goal progress. In six of these instances, participants said that they engage in goal congruent action, such as studying for a test or eating healthy, mainly because they want to be perceived a certain way by their friends or colleagues: *“I would not want my colleagues to think that I am not doing anything for the project.”* Or *“I prefer to study in the library or a café, because there everyone is studying.”* Additionally, three participants expressed that they pursue their goals out of sympathy for others: *“I feel a bit of disappointment for my tutor, she guided me and she is a very nice person. When I see her these days, I feel awful for not finishing my research report.”*

Last but certainly not the least, five instances were mentioned in which participants said they expected their partner to take the initiative for using a condom: *“Getting the condom is always a bit weird. Not only*

does it ruin the flow of things, it may also offend the other person.”

VARIABLES THAT INFLUENCE PRIORITISATION AMONG COMPETING CONCERNS

Now that we provided a layered understanding of experienced conflicts and a number of personal strategies that help reconcile these conflicts, the question becomes why did some of these strategies work and some did not? Based on our findings, we propose three variables that can influence the prioritisation process between to action alternatives: (1) size of the hurdle (operational at the activity level), (2) awareness of potential costs and gains (operational at the concern level), and (3) vividness of the goal to be attained (operational at the emotional level). We will use examples from participants' stories to explain how these three variables can lead “the way out” of a conflict experience:

Size of the hurdle

This variable is related to the amount of resources that need to be invested in the activity to help fulfil the associated concern. Such resources include time, physical, and cognitive effort. For example, it is easier to get tempted by the idea of eating a piece of cake when you can easily order it at a restaurant versus when you have to bake it yourself at home.

Awareness

This variable concerns making a choice based on the realisation of potential costs and gains when choosing between alternative activities. This requires knowing the implications of fulfilling either one of the immediate or distant concerns that are in conflict. For example, one participant mentioned that he took vitamin pills although he hated their taste, only because he knew it was important for his health. If he was not aware of the (anticipated) future gains of taking the pills, he would not endure the immediate cost of drinking something he dislikes. Put more casually, awareness is the variable that makes us say: I know I should/should not because of a specific reason.

Vividness / Authenticity

The vividness variable implies authenticity of underlying concerns as in saying “I know how it feels, I had this before.” For example, one participant

mentioned that he is not used to getting low grades, he always expects to receive high grades. This is because he has attached an emotional value (e.g. pride) to the goal of receiving high grades; and having achieved this goal before, he has internalized it making it part of himself, i.e. increasing goal's authenticity. Arguably, this could work in the opposite direction for goals related to social norms. For example, if one has went through the experience of dealing with a sexually transmitted disease, or knows a friend who did, this person is less likely to have unsafe sex than someone who has no emotional associations with this concern.

DISCUSSION AND DESIGN RELEVANCE

In this paper, our goal was to explore the phenomenon of concern conflicts through examples across three life domains; namely food, procrastination, and safe sex. Based on our findings, we can provide the following scenario for a conflict experience: when people can engage in different actions that are mutually exclusive and they are aware that each action is associated with potential costs and gains which touch upon their concerns, their choice of action will inevitably elicit both positive and negative emotions leading to contemplation. As a result, people devise a number of personal strategies to facilitate prioritising among conflict inducing actions and their underlying concerns. These strategies are inspiring from a designer's perspective, since they can inspire design approaches that support their successful application in daily life.

Our goal in this section is to discuss our findings in the light of the research questions and to highlight the opportunities for design interventions that can help reconcile conflicting concerns. The first research question was formulated as: What motivates people to persist or give up on personally meaningful goals in the experience of concern conflicts?

Our findings revealed three variables that play an important role in choosing between alternate actions and associated concerns. These were (1) size of the hurdle, (2) awareness of potential costs and gains, and (3) vividness. The majority of the examples in our study refer to self-defeating behaviour such as playing the guitar instead of doing homework or eating snacks

before dinner that kill your appetite. Clearly, it is difficult to give up on immediate pleasures for distant goals. It requires a lot of self-control and motivation regulation, while self-defeating behaviour is immediately rewarding and often easy to attain. (Twenge, 2008).

It makes sense to argue that the starting point for boosting self-control would be to make the goal easier to attain, to raise awareness about the associated costs and gains, and to make the goal more vivid to pursue. In other words, by making a cold concern hot. Only then, these goals will be ready to compete with immediate desires. We observed that some strategies did not work because they only addressed the first two variables. For example, one person who promised to eat one apple a day to ensure good health (raising awareness) and who brought the apple to work everyday (making the goal easy to attain), still ended up throwing his apples away. Therefore, we can argue that vividness is a “must have” variable for a strategy to work successfully. That is to say, one should provide the means for the person to emotionally identify with the prospective gains of a goal.

As a result it is important to *design for clear emotional rewards*, which can help people attach an emotional value to their personally meaningful goals (distant concerns). In the previous example, if the person could bring a healthy snack box with seasonal fruits to work instead of a dull apple, he could be more motivated to pursue his distant goal.

This brings us to the other half of the first research question: What motivates people to *persist* on personally meaningful goals in the experience of concern conflicts?

As the future is uncertain, we can maximise future gains and minimise losses only if we can maintain a sense of control over what is happening now (Thompson & Schlehofer, 2008). In that sense, control motivation is an adaptive mechanism that can boost persistence during goal pursuit. Many participants mentioned feeling stupid, weak, or like a failure besides feeling guilty for giving up on meaningful goals for immediate gains, which exemplifies why it is important to feel in control.

One interesting finding was that we tend to incorporate other people into our strategies such as doing homework with other people, studying in a library, trying to lose weight to look attractive to one specific person, and so on. This was interesting because Twenge et al., (2008) suggested that social rejection might lead to self-defeating behaviour. Therefore, we can argue that we use people in our environment as a social control mechanism to make sure we do not engage in self-defeating behaviour. As a result, it becomes important to *design for combination goals* in which design interventions help people fulfil their distant goals through fulfilling other goals such as connectedness. We can argue that positive emotions evoked by fulfilling combination goals simultaneously can counteract the negative emotions evoked by fulfilling the competing concern.

Elicited mixed emotions are the third layer to the experience of concern conflicts. This brings the discussion to the second research question: What discrete emotions dominate the experience of concern conflicts?

Although it is hard to pinpoint patterns in the discrete emotional experiences of our participants, our findings clearly indicated that joy (or desire for joy) and guilt are the most dominant emotions in the experience of concern conflicts, especially those between immediate gains and distant goals. Regret and pride were also dominant, but were present in the aftermath of a conflict experience when people tried to make sense out of past choices. Based on the qualities of emotions experienced before, during, and after the conflict experience; we can argue that design interventions to be proposed will change according to the point of intervention.

Previous research studied the role of anticipated emotions in goal directed behaviour, and stated that being able to anticipate the emotional consequences of a certain action could facilitate goal pursuit (Perugini and Bagozzi, 1998). In other words, if people could anticipate feeling guilty about giving into their immediate desires that cause future loss, they could better commit to their meaningful goals to avoid guilt. Although people are bad at forecasting the intensity and duration of future emotions (Wilson,

2005), they can be good at forecasting discrete emotions based on past emotional experiences. This is because discrete emotions have specific eliciting conditions that are easier to recognise than a single variable such as intensity or duration. Therefore, it is important to design for goals, or sub-goals along distant goals (Ford, 1992), using eliciting conditions of discrete emotions such as pride. Additionally, we can hypothesise that hopeful thinking also potentiates goal progress, since many participants mentioned being optimistic or hopeful about the strategies that they devise. One of our future steps is to investigate hope as a design strategy.

It is important to note that one of the limitations of the study was related to the limited emotion vocabulary of our participants. As a result, it was challenging to mark the differences between emotions such as guilt and shame, or joy and being content during the interviews. Most participants had their own interpretation of their emotional experiences, which makes it difficult to examine the nuances of these experiences. Thus, future studies should focus on using techniques that can better align these two distinct ways of talking about emotions. Additionally, the conflict experiences exemplified in the study may call for a distinction between emotions and feelings, perhaps similar to that provided by Damasio (2003). However, our approach, so far, stems out from appraisal theory and an understanding of the action tendencies of discrete emotions (Frijda, 1986).

Another limitation of this study concerns the use of in-depth interviews in identifying concern conflicts. To our knowledge, there is no specific tool for helping people express their conflicting concerns that could help us avoid socially accepted responses or ideas formulated during the interview. Wilson (2002) argues that we simply do not have conscious access to information such as our goals, desires, and concerns. This task becomes much more challenging in the case of conflicting concerns, because we tend to ignore or deny conflicting thoughts as a way of maintaining balance and perceived control (see Festinger, 1957; Bem, 1967). Therefore, future studies should focus on tools that can identify and validate concern conflicts in a reliable fashion.

Frijda (2010) argued that we are our passions' slaves and our emotions speak louder than free will leaving little room to choose for alternative actions. We want to add that, in the case of conflicting concerns, we are the slaves of multiple passions and are forced to choose which emotion to follow. This is where we are taking up the challenge to design for those passions that can empower choices towards sustained happiness.

ACKNOWLEDGMENTS

This research was supported by the MAGW VIDU grant number 452-10-011 of The Netherlands Organization for Scientific Research (N.W.O.) awarded to P.M.A. Desmet. Special thanks to the research participants who volunteered for the study.

REFERENCES

- Bem, D. J. (1967). Self-perception: An alternative interpretation of cognitive dissonance phenomena. *Psychological Review*, Vol. 74, Issue 3, 183-200.
- Baumeister, R. F., Vohs, D. K., DeWall, C. N., & Zhang, L. (2008). How emotion shapes behaviour: Feedback, anticipation, and reflection, rather than direct causation. *Personality and Social Psychology Review*, Vol. 11, Issue 2, 167-203.
- Emmons, A. R. & King, A. L. (1988). Conflict among personal strivings: Immediate and long-term implications for psychological and physical well-being. *Journal of Personality and Social Psychology*. Vol. 54, Issue 6, 1040-1048.
- Damasio, A. (2003). *Looking for Spinoza*. London: Vintage books.
- Festinger, L. (1957). *A theory of cognitive dissonance*. Stanford, CA: Stanford University Press.
- Ford, M. (1992). *Motivating humans: Goals, emotions, and personal agency beliefs*. Newbury Park, CA: Sage publications.
- Frijda, N. H. (1986). *The emotions*. Cambridge: Cambridge University Press.
- Frijda, N. H. (2010). Not passions' slaves. *Emotion Review*. Vol. 2, Issue 1, 68-75.
- Hycner, R. H. (1985). Some guidelines for the phenomenological analysis of interview data. *Human Studies*, Vol. 8, 279-303
- Moustakas, C. (1994). *Phenomenological research methods*. Thousand Oaks: Sage Publications.
- Ortony, A., Clore, G. L., & Collins, A. (1988). *The cognitive structure of emotions*. Cambridge: Cambridge University Press.
- Ozkaramanli, D., & Desmet, P. M. A. (2012). I know I shouldn't yet I did it again! Emotion-driven design as a means to subjective well-being. *International Journal of Design*, Vol. 6, Issue 1, 27-39.
- Perugini, M., & Bagozzi, P. R. (2001). The role of desires and anticipated emotions in goal-directed behaviours: Broadening and deepening the theory of planned behaviour. *British Journal of Social Psychology*, Vol. 40, 79-98.
- Sleeswijk Visser, F., Stappers, P. J., Lugt, van der R., & Sanders, E. (2005). Contextmapping: Experiences from practice. *CoDesign*, Vol. 1, Issue 2, 119-149.

Thompson, S. C., & Schlehofer, M. M. (2008). The many sides of control motivation: Motives for high, low, and illusionary control. In James Y. Shah, Wendi L. Gardner (Ed.), *Handbook of Motivation Science*. New York: Guilford Press, 41-56.

Twenge, J. M. (2008). Social exclusion, motivation, and self-defeating behaviour: Why breakups lead to drunkenness and ice-cream. In James Y. Shah, Wendi L. Gardner (Ed.), *Handbook of Motivation Science*. New York: Guilford Press, 508-517.

Wilson, T. D. (2002). *Strangers to ourselves*. Cambridge, MA: Harvard University Press.

Wilson, T. D., & Daniel, T. G. (2005). Affective forecasting: knowing what to do. *Current Directions in Psychological Science*, Vol. 14, Issue 3, 131-134.