Choosing for Yourself: A pragmatic framework for developing competence in young people’s personal decision-making

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ABSTRACT

Making personal decisions is a kind of purposeful thought that can be life-changing, so competence in it could be of long-term benefit. Competence, however, is not always well-developed. Routes to a decision are described, and a potential approach to decision-making is constructed which recognises human tendencies and limitations and allows different modes of thought to contribute to the process. This is translated into a framework for supporting personal decision-making, and it is elaborated to highlight potential roles for those who work with and support children, adolescents, and young adults. The influences of a student’s hidden beliefs and self-imposed horizons are briefly discussed, and some cautionary observations are highlighted. On this basis, fostering competence in personal decision-making seems feasible and worthwhile.

Keywords: thinking skills · deliberation · feeling · complementary processes · dual approach

1. Introduction

As Simon McKeon, Chancellor of Monash University, so cogently put it, ‘The only person we spend our entire lives with is ourselves. Deep down, we need to be fundamentally satisfied with the decisions we make’ (McKeon, 2016, p. 25). But competence in decision-making does not come routinely. We do not expect it of young children, adolescents may favour exciting options and immediate rewards, some adults try to reason, some rely on how they feel, some seek advice, and others prevaricate (Bogacz, Brown, Moehlis and Cohen, 2006; Davidson, 1991; Thunholm, 2004; Van Leijenhorst, Moor, Op de Macks, Rombouts Westenberg and Crone, 2010). But this is not to say that competence in decision-making cannot be enhanced (see e.g. Furby, 1992; Mann, Harmoni and Power, 1989). Given that decisions can change life’s trajectory, there is a strong case for trying to do so (Binkley et al., 2012; Newton, 2014). To that end, an account of decision-making processes will be offered, a pragmatic framework constructed to support competence, and some implications for those who foster as a thinking skill in others are discussed.

2. Personal decision-making

Decision-making is taken to be those mental processes which end in the selection of an action in order to achieve a goal (Beyer, 1991). Goals, the objects of intentions, could
be those of others (e.g. children), organisations (e.g. a political party), or the workplace (e.g. a hospital), but the focus here is on achieving the personal goals of decision-makers which they see as important for themselves, rather than achieving goals that are entirely those of others. Our lives are often directed by decisions of this kind, and people who can negotiate them successfully have a valuable competence or life skill (Kaufman, 2009).

3. Ways to a decision

The popular belief is that there are two modes of thought which can produce decisions, one where conscious processing is central, and one where unconscious processes determines the outcome (e.g. Mamayek, Loughran and Paternoster, 2015; Phelps, Lempert and Sokol-Hessner, 2014; Shulman et al., 2016; Van Duijvenvoorde, Achterberg, Braams, Peters and Crone, 2016).

The first draws on deliberate, controlled processes (Imbir, 2016; Plessner, Betsch and Betsch, 2014). Described variously as conscious, low-capacity, sequential, relatively slow, analytical, and rule-following (Dijksterhuis and Nordgren, 2006), a distinctive feature is its ability to engage in hypothetical thought, and, in particular, to reason about alternatives (Amsel, 2011; Evans and Stanovich, 2013; Stanovich and Toplak, 2012). This has direct application in decision-making as it enables ‘What if?’ thinking about options, and can reveal possible outcomes and consequences. A consciously noted match between goal and outcome indicates what logically could be a suitable option, given that the outcome is likely and undesirable consequences are not, or are, at least, tolerable (Furby, 1992; Mann, Harmoni and Power, 1989). Traditionally, decision-making theory – that commonly prescribed, for instance, for commerce and the professions – has largely concerned itself with conscious thought processes. In everyday life, however, there is rarely the time, knowledge, inclination, or resources for this approach (e.g. Zeelenberg, Nelissen, Breugelmans and Pieters, 2008). Nevertheless, there is much that is personal which is not always readily available to conscious processes, such as some values and beliefs (Rogers, 2014). Some values - more or less lasting beliefs in the worth of something (Halfdane and Taylor, 2000) – are acquired by children from carers’ example, praise and punishment, and from other social interaction. Over time, such values may sink below consciousness (Fredrickson and Branigan, 2005; Freeman, 2000; Grusec, Goodnow and Kuczynski, 2000; Peters, 2006). Conscious, deliberate thought may not access them, and, instead, put weight on ‘easy to verbalise attributes’, and so draw conclusions from only a sub-set of what is relevant. Step-by-step reasoning also has difficulty where many variables are involved, but it can be successful in simpler situations where precision is needed (Dijksterhuis and Nordgren, 2006, p. 100). For brevity, ‘conscious deliberation’ will be used to denote this mode of thought.

The second mode of thought is commonly described as an involuntary, largely unconscious and relatively rapid process whose defining feature is its autonomous, automatic operation (Evans, 2006; Stanovich and Toplak, 2012). It behaves as though it converts options into a common currency which facilitates their automatic appraisal. The outcome is a feeling of a particular tone or valence (pleasant/unpleasant) and level of arousal (strong/weak) which prompts the decision-maker to accept or reject options.

1 There are various versions of appraisal theory, but their basic premise is that situations are appraised for their bearing upon matters of personal significance (like personal values and goals) and trigger valenced emotions (see e.g. Moon et al., 2013). Some argue that specific emotions may have
(Dane and Pratt, 2009; Pfister and Böhm, 2008; LeBlanc, McConnell and Monteiro, 2015; Peters, 2006). Dijksterhuis and Nordgren (2006, p. 105) describe unconscious thought’s summary judgments as intuitions, expressed as feelings ‘based on unconscious past experience’ which, by their tone and intensity, indicate the extent to which particular options are beneficial for or detrimental to a personal value or goal. Immordino-Yang and Damasio (2007, p. 3) argue that this affect provides ‘a rudder to guide judgment and action’. For brevity, ‘unconscious thought’ or ‘unconscious processes’ will be used to denote this second mode of thought.

4. Approaches to decision-making

Normative or prescriptive models of decision-making have tended to see conscious deliberation as the sole or main player in identifying the optimal choice. Typically aimed at applications in business and economics, they generally assign weights and probabilities to aims and consequences, and use computation to indicate the choice of most ‘utility’ (e.g. Weiss, Weiss and Edwards, 2009). Conscious deliberation is undoubtedly useful. Amongst other things, it can detect errors in mental representations, it can reason through options to their consequences, and it may be essential when a decision is novel, abstract, or beyond experience (Evans, 2010; Pally, 2005). If applied to personal matters, like buying a house or an automobile, these models often call for prohibitively demanding and time-consuming quantification and computation (e.g. Klutho, 2013; Saaty, 1990), and, in the process, ignore potentially relevant unconscious values and beliefs.

At the other extreme is advice of the kind: ‘Spin a coin and if you don’t like the outcome, choose the other option’. Here, there is no conscious deliberation, only a reliance on unconscious processes and the tone and strength of feelings to indicate a preference. These processes can generally handle incommensurable options, and weigh them against unconscious values and beliefs. They do, however, take such values and beliefs as given, when they may be irrelevant, outdated, maladaptive, or otherwise inappropriate (Haselton and Ketelaar, 2006; Li, Ashkanasy and Ahlstrom, 2014; Plessner, Betsch and Betsch, 2010). Unconscious thought may also fail to challenge the cultural norms which someone assimilates (what Bourdieu (1984) called a person’s habitus), and ignore options that conflict with them (Hodkinson and Sparkes, 1997). While hidden values, beliefs and goals can and do steer unconscious thought, they can also limit it (Clarke and Hunt, 2015; Claxton, Owen and Sadler-Smith, 2015). Deliberate reflection on such matters may make such hidden assumptions open to questioning for their relevance.

On this basis, both kinds of thought can produce a decision, although not always the same one. For example, if someone is offered better employment in a distant city, logic may point to it as the best course of action, while unconscious processes may result in uneasy feelings because they detect or predict a threat to valued friendships.
Each mode of thought may concern itself with only a part of what might be relevant, and the decision could benefit from input from both (Horstmann, Ahlgrimm, and Glöckner, 2009).

To sum up, decisions can contribute significantly to life’s direction, and, insofar as a decider cares about that direction, they are personally important. Some competence in managing the processes of decision-making could offer life-long benefit. People, however, are frequently bad at managing their minds (Dijksterhuis and Nordgren, 2006). There are potentially two ways to a personal decision, but neither comes with a guarantee. Dane and Pratt (2009, p. 16) suggest that ‘combining analytical and intuitive approaches may bear considerable returns’. How might they to be combined?

5. Making the most of how we think

Perkins (2009) has suggested that some everyday decisions are better taken by logic and others by unconscious processes, but is not clear how to dichotomise decisions for allocation to one or the other. Dijksterhuis and Nordgren (2006) suggest that logic is better suited to simple decisions while complex decisions are better handled by unconscious thought. They imply that simple decisions are those to do with well-defined situations, with options that are relatively commensurable and few in number, citing buying an item of clothing as an example. Reber, Beeman and Paller (2013) suggest that these situations may also be allocated automatically, drawing on prior experience, but the process can also be conscious and deliberate, as when someone puts aside logic and consults feelings because time is short.

While reliance on only one mode of thought may be appropriate in some contexts, Baumeister, Masicampo and Vohs (2011) argue that decisions are rarely made entirely through one mode or the other. It seems worthwhile, as a general rule, to take advantage of whatever both can offer (Dane and Pratt, 2009; De Neys and Glumice, 2008; Hanoch, 2002; Isbell and Lair, 2013). Indeed, Peters (2006), has pointed out that people commonly mix both modes of thought, although not necessarily to good effect. Thagard’s decision-making by ‘informed intuition’, however, gives a touch of order to the mix (Thagard, 2001). He recommends using conscious deliberation to clarify the situation and make good deficiencies in past experience, and then allow unconscious processes to decide. Theorists, however, tend to see matters of values and the habitus as beyond their concern (Baron and Brown, 2009), but Hodkinson and Sparkes (1997) argue that ways of supporting decision-making which do not take account of social and cultural constraints are deficient. Personal decision-making could be supported by a framework which offers such a combination, and there are opportunities to practice using it in developing thinking skills (Dane and Pratt, 2009).

6. A framework for supporting personal decision-making

Figure 1 depicts a framework for guiding decision-making which combines conscious deliberation and unconscious thought. Given indications from neuroscience that automatic processes often have primacy in making decisions, unconscious processes may very quickly give the decider an inclination to act in a particular way (Barrett, 2017). Nevertheless, Nordgren, Maarten and Dijksterhuis (2011) found evidence that decisions, particularly when complex, are better when such initial inclinations are put aside temporarily, and conscious deliberation is engaged. This enables mental models of the situation to be clarified, informed or corrected. This stage is indicated in figure 1 by EXPLORE. It is
followed by THINK, conscious deliberation, to take advantage of its capacity for hypothetical reasoning. This is an opportunity to reveal or construct potential alternatives and consequences, and, in particular note those which logically seem to satisfy the goal (or, at least satisfice it – that is, offer an acceptable fit, see e.g. Byron, 2005). Initial inclinations may or may not change as a result, but they are likely to make themselves known through bodily sensations, chiefly valenced feelings. These are noted in the FEEL stage, where unconscious processes indicate options that are or are not in accord with matters of personal consequence, like values and beliefs. Asking ‘Why do I feel like this?’ can reveal their nature, and make them open to question (in THINK mode again) (Schmidt, 2014). The cycle continues, adding and clarifying information, constructing alternatives and judging them, allowing unconscious thought to have its say, and reflecting on the feelings it produces, until an action evolves which acceptably satisfies both modes of thought (the DECIDE stage). At this point, it would be prudent to consider if the decision could be undone (WHAT IF?). It may also help to discuss it with someone to check for matters overlooked (a DISCUSS stage). Until it is put into effect (ENACT), the decision remains an aspiration.

This is not intended to be a mechanical routine or algorithm, but is a guiding structure to be used mindfully and flexibly. In practice, THINK and FEEL are unlikely to be entirely separate: they are stages where conscious deliberation and unconscious processes, respectively, have priority or ‘right of way’. For instance, as each alternative is constructed or perceived, feelings about it are likely to follow. The framework, however, is intended to ensure that neither mode is ignored. It also highlights the need to collate and explore the significance and relevance of the products of both modes in a systematic way. How might competence in using such a model be developed?

7. Developing decision-making competence

Some competence in other kinds of purposeful thought, like understanding, creative and evaluative/critical thinking, is commonly seen as a goal of formal education (Newton, 2013, 2014). These can make significant contributions to decision-making, but it needs more than disconnected practice of its parts if competence is to be developed and demonstrated (Baron and Brown, 2009). The framework offers some structure to decision-making, it is an aide memoire for how these parts relate and interact, and it is intended to prompt decision-makers to attend to and reflect on the products of their cognitive and affective processes. Facility and automaticity in its use, however, may only come with practice. This practice could start in childhood and develop progressively with age. Table 1 illustrates potential roles for carers, counselors, teachers, mentors, and others working with young people at different stages of development.

7.1. Young children

Having young children differentiate, identify, discuss and manage feelings is not uncommon (Immordino-Yang and Damasio, 2007; Volz and Hertwig, 2015), and there is evidence that it is at least loosely associated with effective decision-making (Avsec, 2012). Extending this to include awareness that feelings may have something useful to offer could pave the way to seeing valenced feelings as information (Frijda, 2004). Metacognitive abilities may be embryonic in young children but they are not entirely absent (Davis, Levine, Lench and Quas, 2010). Dilemmas and thwarted desires provide opportunities to explore feelings and
begin to establish habits of mind, like ‘pausing for thought’, and noting that decisions may affect others (Berkowitz, 2011). It is not, however, all about acquiring the pre-requisites of decision-making. Young children may also practice it in safe contexts. For instance, they may choose from alternative ways of doing tasks. Children’s decisions tend to be led by unconscious processes so bringing deliberation into action activates the twofold process outlined in the framework, albeit minimally (e.g. when deciding what to wear to suit changing weather, and justifying the decision). Clearly, where consequences may affect welfare, real-world decisions must be overseen by a capable person. Although decisions of consequence are rarely open to young children, they can be prepared for them through play and stories. Stories engage children and serve as vehicles for presenting dilemmas involving conflicts of interest (Suh and Traiger, 1999). At this stage, values are commonly transmitted to the child, but children can often be included in their justification (Herman, 1997).

7.2. Older children and adolescents

Older children are generally capable of more abstract, hypothetical thought and have more knowledge and experience (Inhelder and Piaget, 2002). Frequent practice with feedback has been found to be highly effective in developing a thinking skill (e.g. Van Gelder, Bissett and Golding, 2004). When in school, time is commonly allocated for some form of personal, social, values, or civics education which can involve games and group discussion to make hidden beliefs and assumptions conscious (see also Heijltjes, van Gog and Paas, 2014; Kuiper and Pesut, 2004; Sutrop, 2014). There may also be discussion of good and bad decisions, modeled decision-making and scaffolded thinking (Kirshner, Sweller and Clark, 2006), and Sweller, van Merrienboer and Paas (1998) recommend that thinking tasks should increasingly omit information to add challenge. In this context, this could mean presenting decisions which have ignored a stage in the framework. When faced with making a decision, and conscious deliberation is not engaged, it may be initiated by having the decider take an outsider’s view (Milkman, Chugh and Bazerman, 2009). When evaluation of options is needed, unconscious processes may be initiated by asking for a quick response. Adolescents, however, may be subject to physiological changes that make them more open to unconsidered, unconscious processes.

They may find it difficult to moderate the tendency, but practice helps (De Neys and Glumicic (2008). Deep-seated values and beliefs can become conscious using ‘laddering’, a technique common in psychotherapy which repeatedly asks, ‘Why do you feel like that?’ to push beyond superficial reflection (e.g. Corbridge, Rugg, Major, Shadbolt and Burton, 1994). There may also be a need challenge the boundaries of the habitus and widen a young person’s horizons.
Figure 1: A cyclical and iterative framework for guiding and exercising personal decision-making.

EXPLORE

FEEL

options

consequences

influences

THINK

options

consequences

influences

WHAT IF?

CHOOSE

DISCUSS

ENACT

Explore: Clarify the situation, goal, constraints, and any given options. In successive cycles, to construct options. A ‘situation’ board to collate information may be useful.

Think: Deliberate on options, consequences for self and others, their likelihood, and influences on the decision process, aiming for a logical choice.

Feel: Note unconscious thought’s responses to options, consequences, and their likelihood, and seek to make reasons conscious.

The cycle continues until little new is added.

Choose: What best achieves the goal and meets the criteria may now be evident, and conscious and unconscious responses may concur. If so, the next step is taken. If not, the cycle may have been left too soon or the cause of the conflict may have been overlooked. Some decisions need time (Bogacz, Brown, Moehlis, Holmes and Cohen, 2006).

What if? Events are uncertain: if the decision is seen as important, it may be possible to make it tentative, and have an ‘escape’ plan (Etzioni, 1989). Some decisions, however, are irrevocable.

Discuss: It may be feasible to discuss an important decision with a trusted person. A decision may, however, be right for one person and wrong for another.

Enact: In which the decision is put into effect.

Note that this should be a flexible, iterative process.
Table 1: A summary of possible roles to support the longer-term development of decision-making competence.

<table>
<thead>
<tr>
<th>Younger children</th>
<th>Older children and adolescents</th>
<th>Young adults</th>
</tr>
</thead>
<tbody>
<tr>
<td>e.g. in home and school contexts:</td>
<td>e.g. in home, school, and overseen contexts:</td>
<td>e.g. in formal education, training for the workplace, and overseen contexts:</td>
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<tr>
<td>• To develop vocabulary to enable discussion about decision-making, now and in the future.</td>
<td>• To help older children identify kinds of decision.</td>
<td>• To discuss the strengths and weaknesses of various routes to a decision, including influences on them</td>
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<tr>
<td>• To promote habits of mind which support decision-making, like seeking/collating information.</td>
<td>• To develop an understanding of decision-making terms and influences on decisions.</td>
<td>• To provide models of decision-making relating to the domain of study for evaluation.</td>
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<td>• To develop awareness of the need to ‘pause for thought’ to check what feelings prompt us to do.</td>
<td>• To raise awareness of conscious and unconscious processes as routes to a decision (decision-making tools).</td>
<td>• To provide opportunities to acquire relevant skills and knowledge enabling the application of these approaches.</td>
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<td>• To provide vicarious examples of decision-making involving dilemmas (e.g. via stories) to show that decisions can have consequences which affect others.</td>
<td>• To model and scaffold decision-making using these tools together.</td>
<td>• To engage young adults with the role of values and ethics in decision-making.</td>
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<tr>
<td>• To provide practice of decision-making involving constraints in meaningful contexts and scaffold the process.</td>
<td>• To prompt the engagement of the decision-making tools, as needed.</td>
<td>• To foster dispositions of self-reflection and constructive doubt when evaluating decisions.</td>
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<tr>
<td>• To relate decisions in the child’s world to values, goals, and beliefs.</td>
<td>• To help make values and beliefs open to reflection.</td>
<td>• To provide formative feedback on decision-making, and on the students’ self-evaluation of their decision-making approach, processes, and skills.</td>
</tr>
<tr>
<td>• To model decision-making, scaffold practice, and provide formative feedback on the child’s decision making.</td>
<td>• To have adolescents reflect on tendencies and biases (e.g. conformity, seeking instant rewards).</td>
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experimented with ‘internally persuasive discourse’ through (often fraught) debate (see Mutusov and Lemke, 2015). Some young people will receive training in occupational decision-making, as in law, health and welfare, retail studies, logistics, business management, and counseling courses (e.g. Wu and Barnes, 2011). Organisational and professional decision-makers are beginning to recognise that both modes of thought can make useful contributions, particularly in the evaluation of options informed by experience (Sadler-Smith and Shefy, 2004; Li, Ashkanasy and Ahlstrom, 2014). The framework (figure 1) has application here as it can encourage the interrogation of feelings for their relevance. At the same time, occupational decision-making can also be personal - achieving workplace goals can itself matter to the worker.

8. A need for thoughtful application and support

Those working with young people have real opportunities to apply the framework to support competence in personal decision-making. Nevertheless, values, beliefs and goals, particularly of young people, are often works in progress. They may evolve relatively quickly, and can be ephemeral, and they can be dysfunctional, maladaptive, unethical, manipulative, or otherwise unacceptable to the host society (Hockey, Maule, Clough and Bdzolam, 2000). It may not be possible to ignore them. In using the framework, there is also the assumption that the decider is mentally capable of making decisions (e.g. Cáceda, Nemeroff and Harvey, 2014). Mental disorders have many forms which vary in severity. For instance, some young people, with a tendency to be anxious, tend to choose conventional options. Reducing that anxiety, however, can help them consider other options (Peng, Xiao, Yang, Wu and Miao, 2014).

Emotional instability, however, can reduce decision-making competence more broadly (Dewberry, Juanchich and Narendran, 2013). The framework may also be inappropriate for some people. Those with oppositional defiant disorder, for instance, often break rules, are aggressive, anti-social, sometimes hyperactive, and cannot maintain attention. Faced with a choice, they tend to focus on rewards and disregard penalties (Luman, Sergeant, Knol and Oosterlann, 2010). As adolescents develop, they can become very mindful of their public image, and will engage in risky activities to impress their peers (Gardner and Steinberg, 2005). Some matters which influence decisions, perhaps biologically ‘pre-wired’, may be difficult to make conscious. But, risky decision-making is not just a matter of brain development; it can also be produced by fatigue (Hockey, Maule, Clough and Bdzolam, 2000).

It has been suggested that those from different cultures may process information differently, so decision-making could vary with culture. For instance, Westerners are popularly seen as being analytical thinkers, and East Asians as being holistic thinkers. Lee and Johnson-Laird (2006), however, demonstrated that underlying mental processes are the same, although thinking strategies may differ. Nevertheless, what is valued, the priority afforded particular values, and the affective states they bring about, can vary with culture and time (e.g. Schwartz, 1994; Kaster, 2005). There are also people in the world whose circumstances give them little choice; for them, personal decision-making may be a pointless activity.²

² Surveys also find that some practitioners may lack a relevant meta-language which makes it difficult for them to conceptualize support for decision-making competence (e.g. Åstrand, 2014; Carnegie, 2003;
9. In Conclusion

Personal decision-making is important because it can shape lives. Chancellor McKeon of Monash University talked of the need to be fundamentally satisfied with the decisions we make (McKeon, 2016). Competence in personal decision-making could increase that likelihood. Traditionally, this has been seen as a process for conscious deliberation, while affect tended to be seen as an irrational contaminant (Newton, 2017). Affect can, however, bring something useful and significant to it. Bringing decision-making capabilities together allows an opportunity to interrogate and test preferences, and enhance competence. By recruiting both unconscious processes (particularly its capacity for automatically drawing on past experiences and weighing alternatives) and conscious deliberation (especially its ability to collect and collate information, analyse, and hypothesise), each can bring something new or otherwise unnoticed to decision-making, and give the other pause for thought or affect. Support for personal decision-making needs to recognise human tendencies, strengths and weaknesses, and make more use of available mental resources. The framework offered here aims to do that. It is seen as a structure for raising awareness of mental resources, and for guiding and promoting competence in general, but especially in young people. Life, however, is complex and a framework may structure the process but cannot guarantee a decision’s success. But, with pause for thought, and for feelings, we may be satisfied that we have done the best we can.

References


