

# How can we help young people to make career enhancing decisions?

Making choices is one of the key tasks of career development. Law and Watts (1977) placed decision learning, i.e. helping students to understand and manage their decision-making, on a par with opportunity awareness, transition learning and self-awareness (the DOTS model).

The school system requires most students to make key decisions at 11+, 13+, 16+ and 18+ with other decision points in between. For students today, career decision-making has become more complex and the stakes are higher. Their decisions can have a profound impact on their prospects of social mobility. At 18+, an ill-considered choice can have considerable financial consequences. But can we really say what is a poor decision in career terms? All decisions have unintended consequences and so Gelatt (1962) argues that an informed decision is “one in which the decider considers alternatives and probabilities and is willing to accept the responsibility for the consequences.” Some people would contend that there are no right or wrong decisions, just decisions we learn from. Martin Katz who has illuminated the role of values in career decision-making put it succinctly when he wrote that we cannot guarantee that students will make wise decisions but we can at least help them to make decisions wisely.

The leading careers theories all shed light on the challenges young people face in making career enhancing decisions. Psychology-based career development theories (e.g. Super; Gottfredson) and psychodynamic theories (e.g. Erikson) highlight the importance of promoting identity formation so that individuals base their decisions on a realistic sense of self. Cognitive-based theories (e.g. Lent, Brown & Hackett; Krumboltz; Peterson, Sampson & Reardon) and constructionist theory (Savickas) focus on individual agency, self-efficacy and understanding in making decisions and being able to capitalise on personal skills, resources and values to provide hope, optimism, adaptability, resilience and, some would add, the pursuit of happiness and wellbeing. Sociology-based theories emphasise the impact of opportunity structures on career choice and exploration (e.g. Roberts), the role and scope of community interaction (e.g. Law) and the possession of different kinds of social, cultural and economic capital on young people’s horizons for action (e.g. Hodkinson). Other careers theories emphasise the unpredictability and lack of control individuals have over their decisions such as the parts played by ‘happenstance’ (e.g. Krumboltz) and chaos (Bright and Pryor). Falardeau (2016) has reminded us that indecision can be constructive and is not always dysfunctional (<http://contactpoint.ca/2016/10/the-four-faces-of-indecision/>). Insights into career decision-making can also be gained from theories and ideas developed outside the immediate careers field. Russell George (<https://secondaryceiag.wordpress.com/2016/09/06/moments-of-choice/?blogsub=confirming#subscribe-blog>) cites a number of pertinent examples such as Kahneman’s prospect theory which discusses the effects of cognitive bias on the choices people make, Schwartz’s work on dilemmas of choice such as the paralysis of choice overload and Duhigg’s work on the power of habit.

This briefing looks at the ten best studies which provide practical insights into how to help young people make career enhancing decisions.

## The ten best studies of career decision-making

### 1. *Moments of Choice: How education outcomes data can better support informed career decisions* (Careers and Enterprise Company, 2016)

[https://s3-eu-west-1.amazonaws.com/cec-app-files-staging/attachments/resources/000/000/007/original/Moments\\_of\\_Choice.pdf?1471879058](https://s3-eu-west-1.amazonaws.com/cec-app-files-staging/attachments/resources/000/000/007/original/Moments_of_Choice.pdf?1471879058)

The Careers and Enterprise Company (CEC) is committed to ‘building on what works’ in careers education and guidance. It commissioned the Behavioural Insights Team (part-owned by the Cabinet Office) to research into how careers information impacts on young people’s choices and aspirations, the contexts in which these decisions occur and how decision influencers (e.g. parents, teachers, the media) could be better supported. This is the second study to use insights from behavioural economics (see *Subject and course choices at ages 14 and 16 amongst young people in England: insights from behavioural economics*. DfE, 2011.

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/182677/DFE-RR160.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/182677/DFE-RR160.pdf)

The research for *Moments of Choice* involved a literature review as well as interviews and observations with young people and careers guidance professionals in eleven schools and colleges in England. It also included round-table events with key stakeholders.

The research concludes that online career advice is challenging to navigate and is often focused on ‘cold’ information (e.g. earnings potential and employment rates) which interests young people but does not provide ‘hot’ information that would enable them to develop a picture of what that job would be like for them. It also reports that young people are sceptical about receiving information through social media (especially Facebook), find it difficult to access the information that is available and are not developing aspirations that align with the direction of the job market. Instead, they aspire to jobs that were around when their parents and teachers were entering the workforce.

The report makes the telling point that career interventions are too often focused on decision points rather than moments of inspiration and choice when young people are building an understanding of what types of jobs they would like to do. It highlights the importance of contextual factors that “sit in the background throughout young people’s lives, informing a sense of what is achievable and creating a ‘running hypothesis’ of career or post-16 destinations on the young person’s radar.”

To enhance young people’s formative career experiences, of course, presents considerable challenges to many schools which rely on punctuated careers provision, limited co-partnership with parents and *ad hoc* employer engagement.

The behavioural insights approach is apparent, for example, in the discussion of ‘confirmation bias’ (when young people privilege information that supports their preconceptions) and ‘choice overload’ (when young people become overwhelmed by the options and avoid the decision altogether). ‘Nudge’ approaches are also implicit in the way that the report acknowledges that policymakers ideally would like to influence individuals’ mental processes so that individuals equate ‘an informed decision’ with making a successful transition into work and helping to secure the future of the British economy. This notion of what constitutes an informed decision is contestable – an informed decision, as Gelatt observed, is one in which individuals are prepared to accept the consequences of their decision. Schools will need to ensure that their careers provision teaches students how to recognise when they are being ‘nudged’.

The report recommends that “instead of simply providing more information, a better approach may be to thoughtfully design the context in which young people seek careers information and make decisions.” It sees the potential, for example, of developing careers websites that copy the way in which ecommerce websites make personalised recommendations to customers. It argues that informed choice is best supported by information provision that:

- understands where young people are coming from and their context in the moment that they are accessing the information;
- is trustworthy;
- is personal and meaningful to the individual seeking advice;
- gives young people agency and is transparent about how their input preferences have led to the advice or information presented by the website;
- structures information provision so that bigger decisions are broken down into smaller choice sets;
- provides information when needed, rather than overloading young people with information that isn't salient, relevant or useful to them at that time;
- helps influencers (teachers, parents or carers, careers guidance professionals) give meaningful advice to young people; and
- signposts actions.

## **2. Cognitive neuroscience: Implications for career strategies and interventions – Martin Westwell & Debra Panizzon (Flinders University, 2011)**

<https://docs.education.gov.au/documents/cognitive-neuroscience-implications-career-development-strategies-and-interventions>

This report, funded by the Australian government, uses insights into the cognitive development of 5-24-year-olds to make recommendations about effective career development strategies and interventions. It outlines research findings about the skills that underpin decision-making (especially the core executive function abilities of impulse inhibition, working memory and cognitive flexibility) and the characteristics of strategies proven to be effective in developing them.

The researchers argue that:

- our understanding of the development of the skills that underpin decision-making should be used to differentially support students from low socio-economic status (SES) backgrounds
- young people need to be better prepared for the continual, lifelong challenges of careers decision-making
- schools should focus on developing the capacity of their own staff to improve cognitive outcomes for young people
- mindful physical exercise such as taekwondo, meditation and yoga improve executive functioning skills
- computer games which improve working memory can enhance career planning
- repeated and sustained practice of executive skills is necessary to maintain improvement
- wellbeing plays a crucial role in executive function use and development
- supporters must know how to scaffold support for young people in decision-making (e.g. using the 6Ss approach described on p27-8 of the report) but also the importance of dismantling scaffolding so as not to hold young people back

- supporting the development of decision-making skills produces longer-term benefits than just supporting decision-making but support for the decision-making itself will be necessary if young people do not have the underlying skills themselves
- decision-making is dependent upon processes in the brain which we still do not fully understand but we should avoid the pitfalls of “neuromyths” (e.g. that students are either left-brain or right-brain thinkers) and categorisation of students (e.g. unfounded stereotypes)
- schools need to ensure that the career decision-making strategies and interventions that they employ are appropriate to the stages of cognitive development outlined in the report (5-10, 10-15, beyond 15).

### **3. Careership theory – Phil Hodkinson, Heather Hodkinson & Andrew Sparkes**

<http://www.cegnet.co.uk/uploads/resources/Careership.pdf>

Phil Hodkinson outlined careership and the research on which it is based in ‘Understanding career decision-making and progression: Careership revisited’ (2009). He and his colleagues focused on how young people make decisions in practice and the influences – actions, events, circumstances – impacting on their decisions that lie outside of their control. They argued that ‘technical rationality’ is an unattainable ideal (e.g. it is not possible for young people to know everything about their impending decision) but that young people engage in restricted and enhanced versions of ‘pragmatic rationality’. Drawing on the work of Bourdieu on habitus and social and cultural capital, they also argued that young people’s decisions are bounded by their ‘horizons for action’. These horizons for action can change when the person’s position changes, when a field changes or when a person’s dispositions change. The significance of this is that schools can improve young people’s decision-making and progression possibilities by helping them to develop their personal resources and personal agency.

### **4. Navigating the labour market: Career decision making & the role of guidance Jenny Bimrose and Sally-Anne Barnes (2007)**

<https://www2.warwick.ac.uk/fac/soc/ier/publications/2007/egreport08.pdf>

This research with adult clients identified four styles of decision-making: strategic; evaluative; aspirational; and opportunistic. It discusses the characteristics of each style but is cautious about concluding that strategists will have more fulfilling careers. The report highlights the importance of careers practitioners understanding the barriers to effective decision-making by individuals. The authors state that “guidance is regarded as useful when it: challenged ideas and understanding; inspired self-confidence; increased self-awareness; gave direction, focus or a plan for the future; provided access to information, knowledge and computer-aided guidance programmes; and structured opportunities to talk to a professional” (p.v-vi).

### **5. Mindset Profiles: Segmenting decision-makers at 14 & 16 (SHM, 2005)**

<http://webarchive.nationalarchives.gov.uk/20130401151715/http://education.gov.uk/publications/eorderingdownload/rw67.pdf>

The consultancy firm, SHM, undertook exploratory research with 58 students from Years 9 and 11 in six schools for the Government. SHM wanted to find out if young people have different mindsets which affect how they make choices and what the implications are for informing, influencing and guiding them. The report emphasises the need for further testing but the researchers are confident

that their model has immediate practical applications. They identify nine mindset dimensions which they group into four categories:

- Orientation: Where is my focus in decision-making? (One dimension)
- Outlook: What is my view of the future? (Two dimensions)
- Risk tolerance: How safe do I want to play it? (Three dimensions)
- Theory of success: How do I think success comes about? (Three dimensions).

These dimensions enabled them to analyse the responses of young people in the workshops they held and to tentatively identify eight segments of young people: confident aspirationalists, determined realists, long-term preparers, indecisive worriers, short-term conformists, unrealistic dreamers, comfort-seekers and defeated copers.

The model has possible uses as a diagnostic tool by policy-makers, guidance providers and young people themselves to understand and learn more about their decision-making. NFER used it in their research into 'How do young people make choices at age 14 and 16?' (2006)

<https://www.nfer.ac.uk/publications/YPM02>.

#### **6. Decision Style and Information Gathering Adolescent Decision Making Styles and "Fact Finding" Stephen B. Johnson (1994)**

<http://www.aare.edu.au/data/publications/1994/johns94308.pdf>

Typologies of decision-making styles abound. Dinklage (1968), for example, identified eight strategies: delaying, fatalistic, compliant, paralytic, intuitive, impulsive, agonising and playful. Jung and McCormick (2010) have investigated the role of amotivation on young people's decision-making efficacy while the role of compromise has been the focus of research by Gottfredson.

This study investigated the impact of decision-making style of final-year high school students in Australia on their information-gathering behaviour. For this research, they used the four styles proposed by Janis and Mann (1977): vigilant, panic, copout and complacency. The results while significant were not substantial. Vigilant decision makers (more independent and active) were more likely to access 'expert' sources of information. Female information gathering was more vigilant than male. Complacent decision makers (more dependent) were more likely to seek easily accessible information from family and personal experiences rather than appropriate sources. This study raised implications about when and how schools should teach decision-making strategies to young people. It exposed the limitations of a purely 'rational' model of decision-making which assumes that more information is better. It highlighted the negative stress caused by leaving decision-making until the decision point has been reached. The research concluded that much information gathering behaviour is idiosyncratic and more needs to be done by schools to overcome the barriers faced by students in obtaining appropriate information.

#### **7. Integrated model – Jane Hemsley-Brown and Nick Foskett (2001)**

<http://www.leeds.ac.uk/educol/documents/00001945.doc>

Hemsley-Brown and Foskett set out to illuminate how young people choose between alternatives in the education and training market place. They constructed a conceptual model based on their research made up of the 'Four C's': context, choice influencers, choosers and choice. The model provides insights into the complexities of decision-making (e.g. decision points are not discrete but

part of a lifelong web of choices and decisions) and the inherently unstable and unpredictable patterns of young people's choice preferences. They relate this to a range of factors, e.g. the role of the family and the school, the social context of choice, the primacy of academic pathways in choice, the role of perception and image, the reinforcement of self-image, rationality and sub-rationality in choice and the stability and instability of choice.

## **8. The DECIDES Model (Krumboltz & Hamel, 1977)**

Rational approaches break down decisions into a sequence of logical steps. Thus, in the DECIDES model:

D = Define the problem

E = Establish an action plan

C = Clarify values

I = Identify the alternatives

D = Discover probable outcomes

E = Eliminate alternatives systematically

S = Start the action

Evidence for the effectiveness of teaching rational decision-making approaches is mixed and suggests that some students may benefit less than others (Krumboltz *et al.*, 1979; Krumboltz *et al.*, 1986; Argyropoulou & Sidiropoulou-Dimakakou, undated).

Rational methods tend to overlook the affective component of decision-making. Teaching emotional self-awareness may be the key to helping students whose approach to decision-making is based on intuition, dependency, spirituality or belief.

## **9. CDDQ.org**

<http://kivunim.huji.ac.il/cddq/>

A research team at the Hebrew University of Jerusalem and The Ohio State University led by Professors Itamar Gati and Samuel H. Osipow. argued that normative and descriptive careers theories and single characteristic decision-making style typologies (such as Harren, 1979) did not help individuals to make better career decisions. The research with undergraduates led to the development of the 'PIC' model for systematic decision-making (Prescreening – In-depth exploration – Choice) and a multidimensional profile to help individuals understand their decision-making processes. The profile has 11 dimensions (Information processing; Information gathering; Amount of effort invested in the process; Consultation with others; Aspiration for an "ideal occupation"; Willingness to compromise; Locus of control; Procrastination in entering the process; Speed of making the final decision; Dependence on others; Desire to please others). Individuals can complete a number of free questionnaire, including an assessment of their profile, and the website has other useful resources for careers practitioners.

## 10. David Tiedeman

David Tiedeman's early ideas about the uniqueness of the individual and the complexity of decision-making were influenced by career development theory. With O'Hara (1963), he formulated a two-stage decision-making model with clearly articulated phases:

- Anticipating a choice: exploration, crystallization, choice and clarification
- Adjusting to a choice: induction, reformation and integration.

Tiedeman's model is explained in a 1979 article by Harren (<http://files.eric.ed.gov/fulltext/ED123364.pdf>) who in the same year published an 'Assessment of Career Decision Making' tool based on the approach.

In the early 1980s, Tiedeman collaborated with his wife, Anna Miller-Tiedeman, whose Lifecareer theory offered a spiritual perspective on decision-making. His own thinking continued to evolve in ways which prefigured career construction, social constructivist and narrative theory and practice developed by Mark Savickas and others in the early twenty-first century. Tiedeman articulated a number of powerful ideas including ideas about the self (i.e. that the self is a construction and that the individual is a self-organizing system), nonlinear movement (i.e. that people also work backwards through decision-making phases), parallel streams (i.e. that people can and do simultaneously pursue different vocational interests) and purposeful action (i.e. that places purpose, not work, as the central mechanism of career thinking and proposes that the role of careers practitioners is to help individuals find their purpose).

In 2008, the *Career Development Quarterly* published a commemorative issue celebrating the significant contribution of David Tiedeman to the careers field (<http://www.freepatentsonline.com/article/Career-Development-Quarterly/177025278.html>).

### Further reading

Argyropoulou, K. & Sidiropoulou-Dimakakou, D. (Undated). Applications of Self- Efficacy Theory to the Understanding Career Decision Making of Higher Education Students.

[[http://www.ibrarian.net/navon/paper/Applications\\_of\\_Self\\_Efficacy\\_Theory\\_to\\_the\\_Unde.pdf?paperid=1220592](http://www.ibrarian.net/navon/paper/Applications_of_Self_Efficacy_Theory_to_the_Unde.pdf?paperid=1220592)]

Bandura, A. (1977). Self – efficacy: Toward a unifying theory of behavior change. *Psychological Review*, 84, 191- 215.

Crites, J. O. (1978). *Career Maturity Inventory*. N.Y.: McGraw – Hill

Dinklage, L.B. (1968) *Decision strategies of adolescents*. Unpublished doctoral dissertation, Harvard University Graduate School of Education.

Erikson, E. (1950). *Childhood and Society*. New York: Norton.

Gelatt, H. (1962). 'Decision-making: A Conceptual Frame of Reference for Counseling'. *Journal of Counseling Psychology*, 9, 240-45

Gottfredson, L.S. (1981). Circumscription and compromise: A developmental theory of occupational aspirations. *Journal of Counseling Psychology*, 28, 545-579.

Hodkinson, P. (2009) 'Understanding career decision-making and progression: Careership revisited' *Career Research and Development: the NICEC Journal*. 21 4-19

- Jung, J.Y. & John McCormick, J. (2010): Amotivation and the occupational decision: an investigation of Australian senior high school students, *British Journal of Guidance & Counselling*, 38:4, 441-458
- Katz, M.R. (1973). 'The name and nature of vocational guidance' in Borow, H. (ed.) *Career Guidance for a New Age*. Boston: Houghton Mifflin Company.
- Krumboltz, J. D. & Hamel, D. A. (1977). *Guide to career decision making skills*. New York: College Entrance Examination Board.
- Krumboltz, John D and Levin, Al S. (2004) *Luck is no Accident: Making the most of Happenstance in Your Life and Career*. California Impact
- Krumboltz, J. D.; And Others (1979). *The Effect of Alternative Career Decision-Making Strategies on the Quality of Resulting Decisions*. California: Stanford Univ., School of Education.  
[<http://files.eric.ed.gov/fulltext/ED195824.pdf>]
- Krumboltz *et al.* (1986). Teaching a rational approach to career decision making: Who benefits most? *Journal of Vocational Behavior* 29, 1-6  
[[https://www.researchgate.net/profile/Richard\\_Kinnier/publication/256105930\\_Teaching\\_a\\_rational\\_approach\\_to\\_career\\_decision\\_making\\_Who\\_benefits\\_most/links/55f0905808aedecb68ffb63d.pdf?origin=publication\\_list](https://www.researchgate.net/profile/Richard_Kinnier/publication/256105930_Teaching_a_rational_approach_to_career_decision_making_Who_benefits_most/links/55f0905808aedecb68ffb63d.pdf?origin=publication_list)]
- Law, B. (1981). 'Community interaction: a mid-range focus for theories of career development in young adults' *British Journal of Guidance and Counselling*, 9: 142-158.
- Law, B. & Watts, A.G. (1977) *Schools, Careers and Community*. London: CIO Publishing.
- Lent, R.W., Brown, S.D. & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice and performance. *Journal of Vocational Behavior*, 45, 79-122.
- Mitchell, L.K. and Krumboltz, J. (1996) 'Krumboltz's learning theory of career choice and counselling'. In Brown, D. and Brooks, L. (eds), *Career Choice and Development*, 3rd edn. San Francisco: Jossey-Bass.
- Petersen, G.W., Sampson, J.P. & Reardon, R.C. (1991). *Career development and services: A cognitive approach*. Pacific Grove, CA: Brooks/Cole.
- Pryor, R. & Bright, J. (2011). *The Chaos Theory of Careers. A New Perspective on Working in the Twenty-First Century*. London: Routledge.
- Roberts, K. (1977) 'the social conditions, consequences and limitations of career guidance'. *British Journal of Guidance and Counselling* 5:1, 1-9
- Savickas, M.L. (2012) Life Design: A Paradigm for Career Intervention in the 21st Century *Journal of Counseling & Development* 90 (1) 13-19
- Super, D. E. (1981). "A Development Theory: Implementing A Self Concept," In: Montrose, D. and Shinkman, C. (eds), *Career Development in the 1980s*. Springfield MA: Montrose.
- Tiedeman, D. V., & O'Hara, R. (1963). *Career development: Choice and adjustment*. New York: College Entrance Examination Board.

Anthony Barnes (January 2017)