STAMMERING AND THE COM-B MODEL: EXPLORING PARENTS' VIEWS OF POST-TREATMENT CHANGES IN COMMUNICATION

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Key words and learning points

Key words: stammer, change, COM-B, parents

Learning points:

- to learn more about the individual nature of stammering;

- to become familiar with the COM-B model and its application to stammering; and

- to learn more about the factors which facilitate increased participation following treatment for stammering.

Responses to therapy

A large proportion (50-70%) relapse after treatment
(Cooper, 1990; Craig & Calver, 1991; Silverman, 1992)

Craig (1998) identified this as a critical area for research, in the context of life events, mood, individual differences, stress and anxiety

Studies show fluctuation in progress post-therapy, both for amount of stammering and emotional impact
(Fry et al., 2009, 2014; Millard, 2011)

The story so far

Self-perception of control (LOC) predictive of effectiveness
(DeNil & Kroll, 1995)

Differences in temperament and motivation
(Zebrowski & Conture, 1998)

Presence of social anxiety and its impact on maintenance of treatment effects
(Iverarch et al., 2009; Iverarch and Rapee, 2014)

Common factors, common to all treatments such as client characteristics, therapist qualities, change processes, treatment structures and relationship elements
(Greencavage & Norcross, 1990; Wampold, 2001)

Frameworks of change

Social cognition models:

Theory of Planned Behaviour (Ajzen, 1991)

Social Cognitive Theory (Bandura, 1991)

Protection Motivation Theory (Rogers, 1975)

Frameworks of change

The Transtheoretical Model of Change (Prochaska, DiClemente & Norcross, 1992) aka the 'Stages of Change' model:
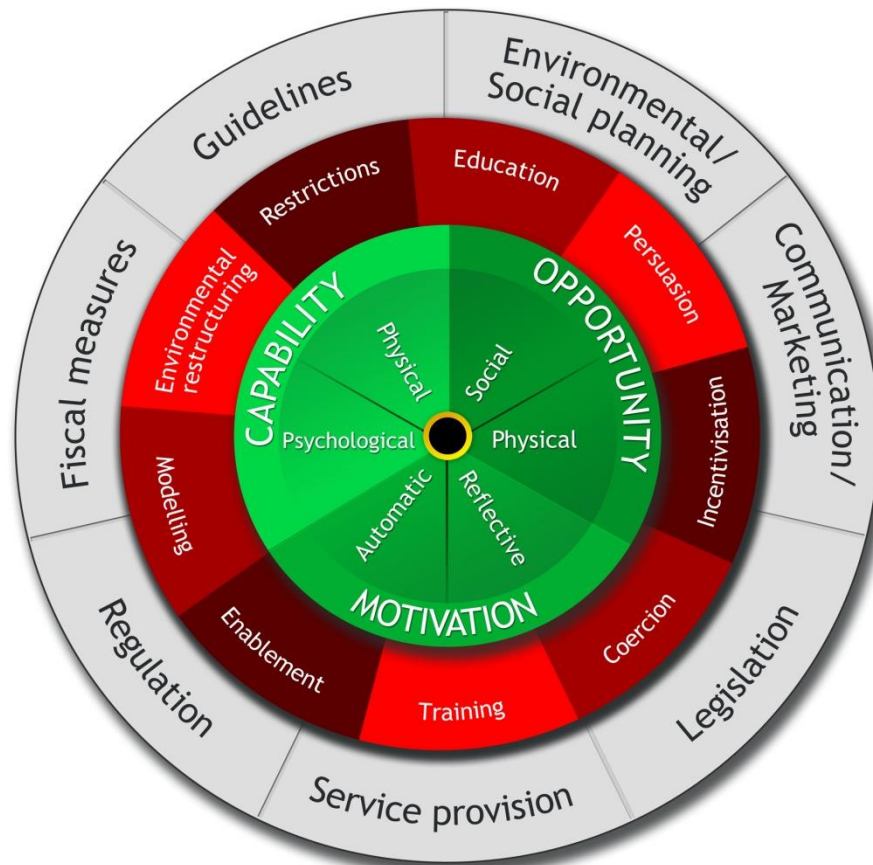
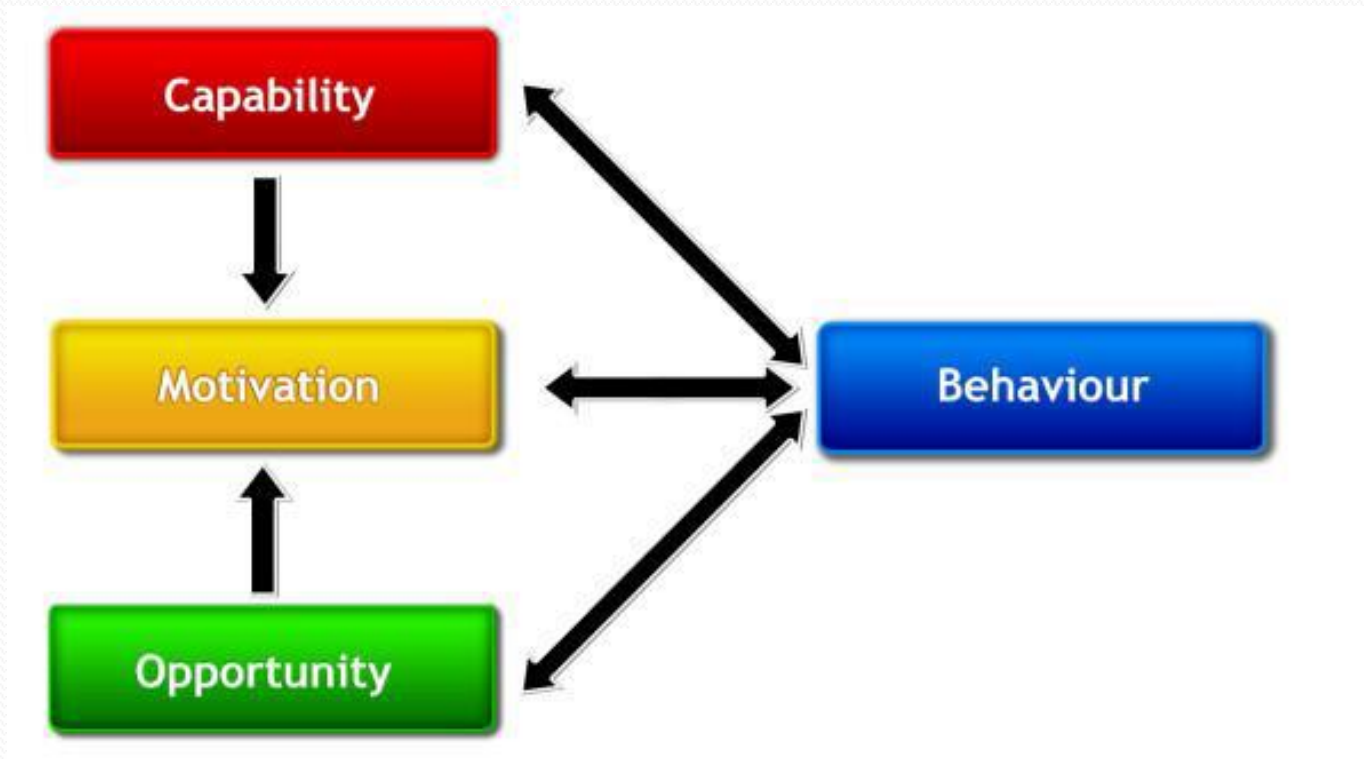Precontemplation

Contemplation

Preparation

Action

Maintenance

The Behaviour Change Wheel
(Michie et al., 2011; Michie et al, 2014)

The COM-B model

(Michie et al., 2011)

A walk in the park...

Using the model

Research question: is a theoretical framework useful in understanding change following treatment for stammering?

Design

10 participants, semi-structured questionnaires

COM-B requires the identification of a behaviour and its definition

Thematic Analysis used, two analyses completed

Software: QDA Miner Lite (freeware)
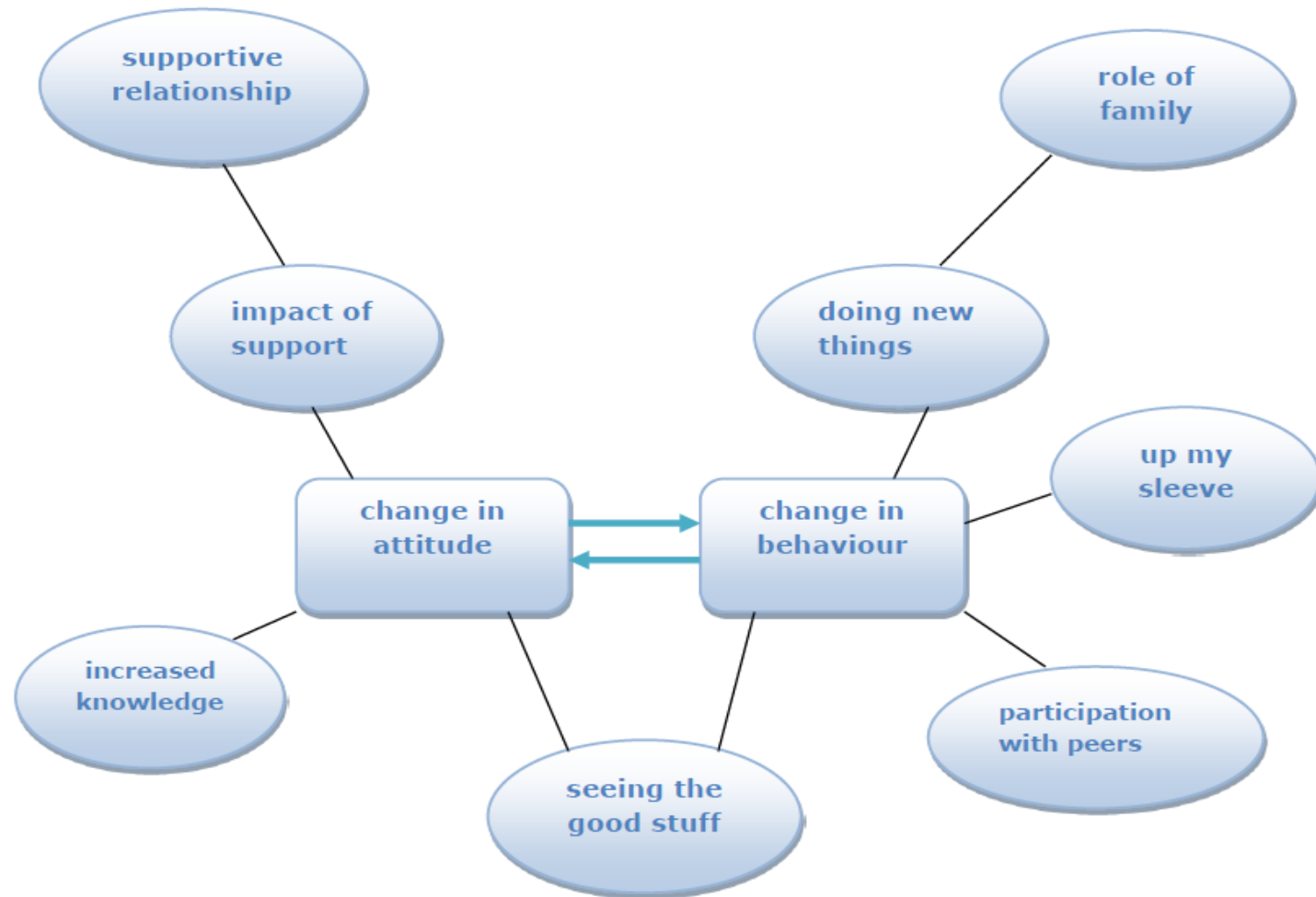
Inductive vs deductive coding

inductive (bottom up) (Frith and Gleeson, 2004)
themes link to data, *not* driven by theoretical background or an attempt to fit codes into a pre-existing framework
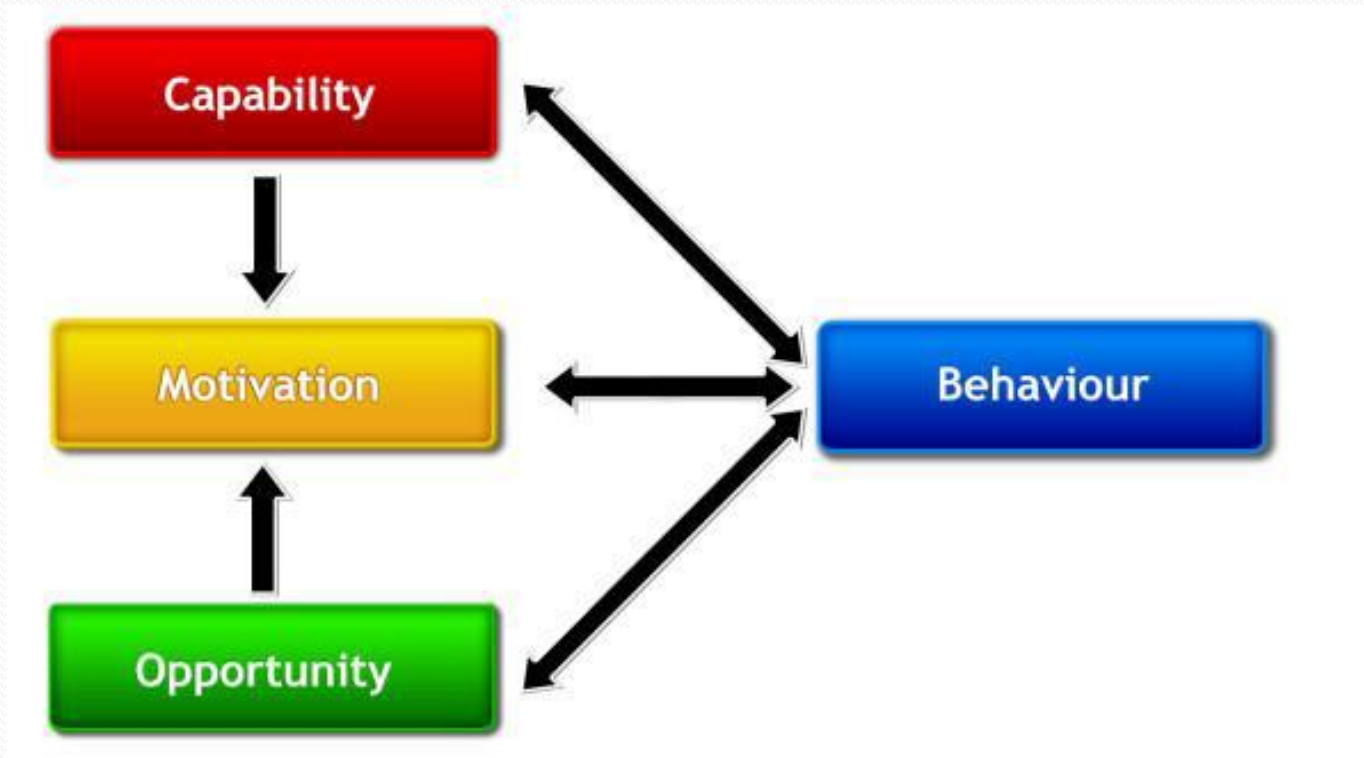
deductive/theoretical (top down) (Boyatzis, 1998)
driven by a particular research interest or area, with a theoretical background which provides a framework for analysis

Thematic map – inductive analysis

The COM-B model

(Michie et al., 2011)

Key findings

All inductive codes matched on to one or more sections of the COM-B model

The COM-B model is one way of deconstructing participants' responses, in order to identify barriers and facilitators to change

The model allowed for internal and external factors to be considered and categorised, and is therefore considered useful

Key findings

Key themes emerged from using the COM-B model:

Parents have a key role in treatment and the maintenance of change

Understanding stammering leads to increased confidence

Participation does not depend on fluency

Increased independence leads to increased agency

Physical capability

step up ←→ step back

Physical capability

Step up (has tools/uses tools effectively/talks more)

"I think it gave him a few tools and a bit of confidence" P7

"he has always been wanting to communicate... sometimes with his fluency technique and sometimes with as much stammering as he had before" P4

Step back (family working together/consistent approach/family communicates differently)

"he is twelve now and he needs to take a little bit more ownership for it, so we deliberately stepped back" P2

Reflective motivation
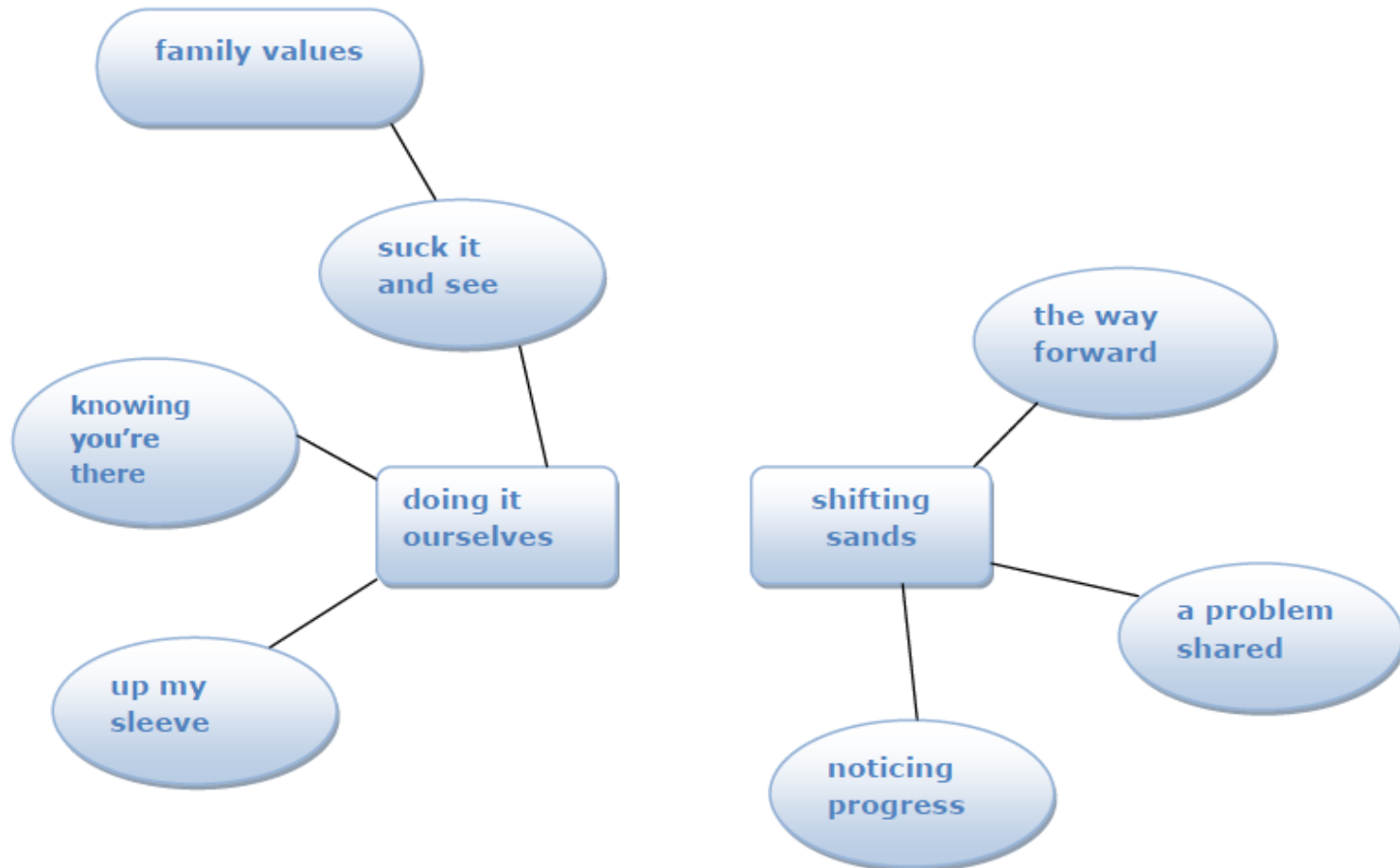
Reflective motivation

Suck it and see (readiness to engage/experiencing stuttering/new approaches/trying new things)

"actually doing some stammering yourselves... It was that eye opener, to what your child is thinking every single day" P5

Up my sleeve (knowing what helps/more confidence)

"we have been equipped with ways to deal with it and to talk with her in general. There is less angst at home" P8

Social opportunity
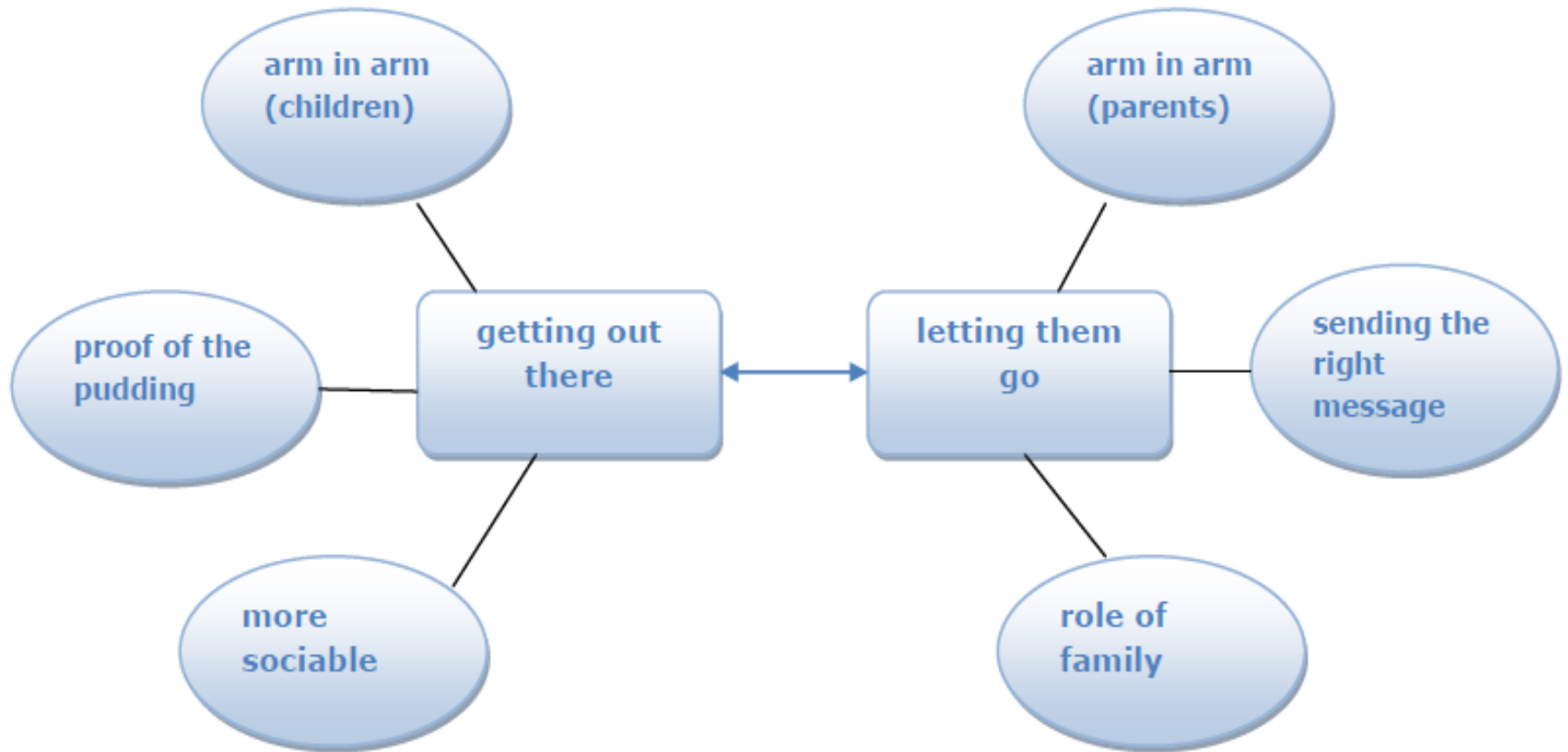
Social opportunity

Arm in arm (children)

"his classmates now know that he has a stammer and it does not seem to affect anything" P1

Proof of the pudding

"he is putting himself out there and the more risks he is taking the more things he has done. His confidence grows every time" P6

Arm in arm (parents)

"hugely reassuring to realise that X was normal... all of the parents shared the same worries as we did" P4

Sending the right message

"letting him do more things that he is capable of doing, and in fact does very well" P5

Implications

So what does this mean for therapy?

Implications (Atkins et al, 2017)

Sources of behaviour

TDF Domains

Soc - Social influences
Env - Environmental Context and Resources
Id - Social/Professional Role and Identity
Bel Cap - Beliefs about Capabilities
Opt - Optimism
Int - Intentions
Goals - Goals
Bel Cons - Beliefs about Consequences
Reinf - Reinforcement
Em - Emotion
Know - Knowledge
Cog - Cognitive and interpersonal skills
Mem - Memory, Attention and Decision Processes
Beh Reg - Behavioural Regulation
Phys - Physical skills
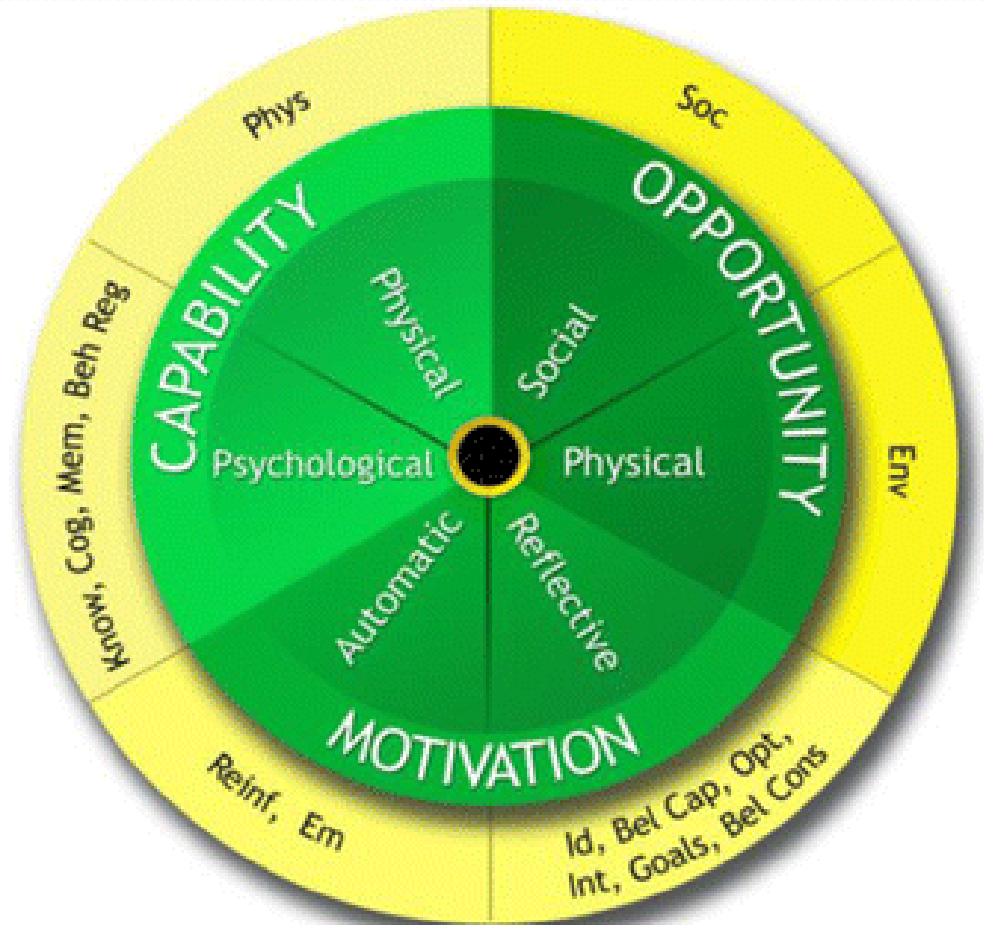
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References

Alexander, K.E., Brijnath, B. & Mazza, D. (2014). *Barriers and enablers to delivery of the Healthy Kids Check: An analysis informed by the Theoretical Domains Framework and COM-B model* Implementation Science, 9:60.

Ajzen, I. (1991). The Theory of Planned Behaviour. *Organisation Behaviour and Human Decision Processes, 50*, 179-211.

Atkins, L., Francis, J., Islam, R., O'Connor, D., Patey, A., Ivers, N., Foy, R., Duncan, E.M., Colquhoun, H., Grimshaw, J.M., Lawton, R., & Michie, S. (2017). *A guide to using the Theoretical Domains Framework of behaviour change to investigate implementation problems.* Implementation Science, 12:77.

Bandura, A. (1991). Social cognitive theory of moral thought and action. In W. J. Kurtines and L. Gewirtz (Eds.) *Handbook of Moral Behaviour and Development* (Vol. 1, pp. 45-103). Hillsdale, NJ: Erlbaum.

Boyatzis, R.E. (1998). *Transforming qualitative information.* Sage: Cleveland

Cooper, J. A. (1990). *Research needs in stuttering: Roadblocks and future directions.* ASHA Report, no. 18. Rockville, Maryland: ASHA.

Craig, A. (1998). Relapse following treatment for stuttering: A critical review and correlative data. *Journal of Fluency Disorders, 23,* 1-30.

Craig, A. R., & Calver, P. (1991). Following up on treated stutterers: Studies of perceptions of fluency and job status. *Journal of Speech and Hearing Research, 34,* 279-284.

References

DeNil, L. F., & Kroll, R. M. (1995). The relationship between locus of control and long-term stuttering treatment outcome in adult stutterers. *Journal of Fluency Disorders, 20,* 345-364.

Floyd, J., Zebrowski, P. M., & Flamme, G. A. (2007). Stages of change and stuttering: A preliminary view. *Journal of Fluency Disorders, 32,* 95-120.

Frith, H., & & Gleeson, K. (2004). Clothing and embodiment: Men, managing body image and appearance. *Psychology of Men and Masculinity, 5 (1),* 40-48.

Fry, J., Botterill, W. M., & Pring, T. (2009). The effect of an intensive group therapy program for young adults who stutter: A single subject study. *International Journal of Speech-Language Pathology, 11(1),* 12-19.

Fry, J., Millard, S., & Botterill, W. (2014). Effectiveness of intensive, group therapy for teenagers who stutter. *International Journal of Language and Communication Disorders, 49(1),* 113-126.

Greencavage, L. M., & Norcross, J. C. (1990). Where are the commonalities among the therapeutic common factors? *Professional Psychology: Research and Practice, 21,* 372-378.

Iverarch, L., Jones, M., O'Brian, S., Block, S., Lincoln, M., Harrison, E., Hewat, S., Cream, A., Menzies, R. G., Packman, A., & Onslow, M. (2009). The relationship between mental health disorders, stuttering severity and treatment outcomes among adults who stutter. *Journal of Fluency Disorders, 34,* 29-43.

References

Iverach, L., & Rapee, R. M. (2014). Social anxiety disorder and stuttering: Current status and future directions. *Journal of Fluency Disorders, 40,* 69-82.

Michie, S., Atkins, L., & West, R. (2014). *The Behaviour Change Wheel: A Guide to Designing Interventions.* London, UK: Silverback.

Michie, S., van Stralen, M. M., & West, R. (2011). The behaviour change wheel: A new method for characterising and designing behaviour change interventions. *Implementation Science, 6,* 42.

Millard, S. (2011). Intensive Group Therapy for Children Who Stutter: Early Evidence. *Perspectives on fluency and fluency disorders. American Speech-Language-Hearing Association. 21(1)*, 22-32.

Prochaska, J. O., DiClemente, C. C., & Norcross, J. (1992). In search of how people change: applications to addictive behaviours. *American Psychologist, 47,* 1102-1114.

Rogers, R. W. (1975). A protection motivation theory of fear appeals and attitude change. *The Journal of Psychology, 91(1),* 93-114.

Silverman, F. H. (1992). *Stuttering and other fluency disorders.* Englewood Cliffs, NJ: Prentice-Hall.

Wampold, B. E. (2001). *The Great Psychotherapy debate: Models, methods and findings*. New Jersey: Erlbaum.

Wegner, D.M. (2002). *The illustration of conscious will.* Cambridge, MA: MIT Press.

Zebrowski, P. M., & Conture, E. G. (1998). Influence of non-treatment variables on treatment effectiveness for school-aged children who stutter. In A. K. Cordes & R. J. Ingham (Eds.), *Treatment efficacy for stuttering: A search for empirical bases (pp. 293-310).* San Diego: Singular Publishing Group, Inc.