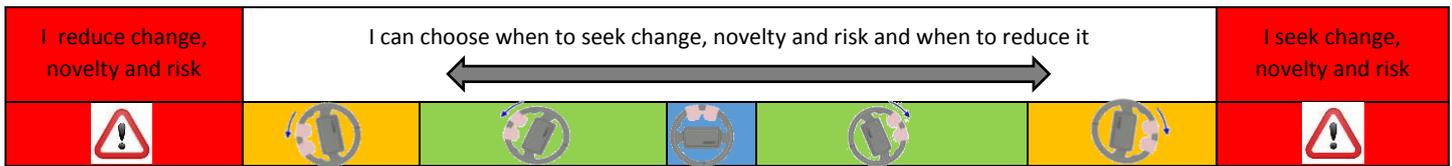


## A Psychological and Developmental Understanding of the Factor Embracing Change



Change is an inevitable aspect of life. There are some situations where change is unavoidable and out of our locus of control; in other situations, we can exert influence - we can choose to avoid, minimize or resist change, or we can choose to bring change about. In reducing change we assume that maintaining our current situation is preferable to moving from it; in seeking change, we assume that moving from our current situation is preferable to maintaining it.

Self-Expansion Theory (Aron & Aron, 1996) is a psychological construct which explores a person's drive for change. The theory proposes that if we depict a person's sense of self as a territory, we can consider the extent to which a person chooses to include or incorporate new elements into their territory; these elements may include new experiences, ideas, relationships and possessions. As new elements are incorporated, a person's territory expands; we might call these people *high expanders*. In contrast, *low expanders* choose not to incorporate new elements, be they experiences, ideas, relationships or possessions, into their territory. Their territory will remain the same size; their intention is to keep their world as it is. It is important to note that reducing change may require as much purposeful and effortful action as seeking to incur change; for example, it takes effort to continue to focus on a task and avoid distraction.

The task of managing the interplay between change and stability is something that we do every day; indeed it is a task that infants are navigating from their earliest days, and continue to do as they develop into adulthood (Rothbart & Bates 2006). An infant uses a range of seeking behaviours to seek proximity from their caregiver, whilst also detaching from them to explore their world (Ainsworth 1979; Bowlby 1969). Toddlers engage in repetitive behaviours, reinforcing their schemas through predictable responses, whilst also developing new schemas by experimenting with new behaviours and exploring new aspects of their world (Piaget 1969). Parents support their child's healthy development by instilling consistent daily routines and clear, predictable expectations for behaviour, whilst encouraging their children to try new foods, embrace new experiences, and take appropriate risks in their play. Teachers purposefully use recognisable, concrete objects and familiar experiences to teach new, abstract and unfamiliar constructs.

Adolescents perhaps evidence the fragile interplay between the predictable and the novel more starkly than younger children. They may have certain outfits that they feel secure wearing, or music tracks they listen to again and again, whilst also being actively drawn to exploratory, impulsive, sensation seeking, risk taking behaviours. Both strategies may serve the same goal: to be socially acceptable to their peers and reduce likelihood of peer rejection (Leary 1995, 2005). Whilst social acceptance is a primary need common to us all; a need anthropologically linked with our survival amongst a social group, as teenagers increasingly detach from their nuclear family unit, social acceptance amongst peers is perhaps even more important. Teenagers' inbuilt drive for social acceptance amongst peers is now seen as a seminal factor which unpacks a widely held neuromyth about adolescents' generic risk taking and impulsivity.

Neuroscientists largely agree that by the age of ten, impulsivity in children tends to decline (Casey et al. 2008), and that whilst adolescents' predisposition to seek out novel experiences does increase between the years of ten and fifteen, after this point it gradually stabilizes (Steinberg 2007). Why then are adolescents more likely than younger or older peers to engage in risky behaviours such as binge drinking, smoke cigarettes, casual sex, criminal activity, dangerous driving?

For some years it was widely perceived that adolescents are more drawn towards impulsivity and risk taking than their younger children or adults due to structural differences in the maturation of their brain. There is now substantial evidence to suggest that adolescents' risk taking shows little variation from children or adults. There are significant differences however in the reward seeking circuit of the brain. When an adolescent associates risk taking with peer social reward, their inclination to engage in risk taking, impulsive action increases (Gardner & Steinberg, 2005; Smith et al., 2014; Blakemore, 2008; Chein et al., 2011). It is critical that adolescents are aware of how their risk taking behaviours increase when in social groups and they are equipped with strategies to anticipate and manage these situations

Healthy development requires change and risk, as well as stability and predictability in equal measure. Teaching children and adolescents to optimally self-regulate their response to change and risk is crucial in supporting their mental health, social competencies and achieving good learning outcomes. In seeking change we take opportunities to try new experiences without fearing failure; we develop intrinsic motivation and learn to set ourselves goals and find ways to achieve them; we look for solutions to things that are preventing us from moving forward and develop resourcefulness; we learn to accept and calibrate a healthy level of risk and danger; we build resilience, navigating our way through struggles; we engage in a wide range of relationships, developing our social competencies. In reducing change we learn to value routines and rhythms, finding internal stability and discipline; we develop focus and stamina, resisting temptation to lose concentration; we struggle to finish what we started, building our perseverance; we learn to self-monitor a little more... delaying our instinctive responses and exerting caution and impulse control; we look for ways to organise ourselves and develop a conscientious approach.

## **The incipient risks associated with a polar bias towards seeking change, novelty and risk**

Children and adolescents with a polar bias towards change, novelty and risk direct their attention towards what they do not yet have; they are not satisfied with their current situation and use their influence to change it. Their drive for change may be fuelled by a desire for novel sensation seeking: to experience something new and exciting, to feel a sense of thrill or anticipation. For others, it may be an escapist response to what feels like a constraining, limiting, controlling environment, or perhaps an empowering release from an emotional state which is acutely painful, emotionally numbing or disempowering. It may be fuelled by self-promotion or self-advancement: aspiring to achieve something, do or have something before others, or trying to keep up with or prove something to others. Others may struggle to sit with situations that are challenging, effortful, tedious or uncomfortable, wanting to relieve themselves by moving or changing the situation. There may other children whose early, formative years have not equipped them to sit with the present, the mundane or the routine; life has been a series of stimulating events, and now to be bored, silent or still is uncomfortable and threatening.

Individuals may externalise their high desire for change, seeking to change their external world in some way, alternatively, they may choose to focus on changing something within their own internal, less disclosed world. We may recognise children who externalise their high drive for change as those who have lots of new and novel ideas, set themselves aspirational goals, enjoy forming new relationships, exhibit a have a go attitude towards new and novel experiences, and navigate happily through times of transition and change; all good attributes to have. However, if children habitually externalise a high drive for change, over a long period of time, they may begin to exhibit behaviours which limit their rounded development.

They may struggle to develop perseverance and stamina when tasks are challenging, or sustain attention and focus, when activities are repetitive or require concentration; this is likely to have a limiting impact on their learning outcomes (Duckworth et al. 2007). They may not learn to develop contentment and gratitude, leaving them more susceptible to feelings of dissatisfaction and resentment, which can adversely affect their mental and physical health (Wood et al. 2010). They may exhibit poor impulse control, and be less able to monitor and regulate their response in different situations (Mischel et al. 1988) which may result in poor social functioning and potential social isolation (Eisenberg et al. 2000). They may struggle to delay gratification, needing to have what they want straight away; numerous studies evidence that children and adolescents who struggle to delay gratification are more likely to use cigarettes, alcohol and drugs, and underperform academically (Wulfert et al., 2002). They may gravitate towards highly arousing or risky situations, something that the teenage brain is particularly predisposed towards, especially in the company of their peers (Blakemore, Robbins 2012; Steinberg 2008). They may be drawn to risk taking, thrill seeking behaviours in order to deflect from the pain they feel inside, or to feel a sense of agency, efficacy and control rather than the impotency or passivity they want to reject.

We may recognise those who internalise their high desire for change as children who have an expansive internal world where new and novel ideas are privately cultivated and explored; where aspirations are held privately and serve as a powerful intrinsic motivator; where creative possibilities are explored and yield innovative approaches. Again, all admirable attributes that we would want children to inculcate and draw upon at the appropriate time. Once again however, children who habitually internalise a high drive for change over a long period of time may begin to adopt behaviours which limit their rounded development. They may internalise unrealistic, demanding personal aspirations which place them under intolerable tension; under times of stress or in the face of failure this may trigger an extreme emotional response (Higgins et al., 1994; Elliott & Dweck 1988; Higgins 1987) They may at times appear rash and hasty, suddenly externalising an idea which whilst well formulated in their own mind is completely new to others which can cause confusion and relational tension. They may be drawn to hidden, solitary, risk taking behaviours, undisclosed to those around them, perhaps placing them in danger. Under stress, they may look for escapist outlets, perhaps exploring ideas or playing out fantasies which are not conducive to their social and psychological wellbeing.

## **The incipient risks associated with a polar bias towards reducing change, novelty and risk**

Some children and adolescents may exert their influence by reducing change, novelty and risk; they seek security, stability, predictability and consistency. They focus their attention on what they already have, can do or are; they are satisfied with the current situation and seek only to make it more secure.

Such a strategy may be self-protective, to avoid perceived risk and minimize threat; it may be self-promotional or self-advancing, to deepen understanding in a specific field or complete something to a level of perfection. It may emanate from a high need for self-control, seeking to deny or inhibit a particular behaviour or striving to exert control over a situation which feels chaotic or insecure. It may be a consequence of *over protective* parenting where children are overly directed and lack opportunity to develop personal autonomy, or effective problem solving or coping strategies (Rapee 1997); or a consequence of *anxious rearing* where children's anxieties and avoidances are accepted and reinforced rather than challenged and supported (Grüner et al. 1999).

In seeking to reduce change, a child or adolescent exerts control to make their world more predictable and lower perceived risk. Some children may seek to reduce change and risk in their externalised world by inhibiting or controlling their behaviours, their interactions, and their activities. Other children may seek to reduce change and risk in their internalised world by inhibiting and exerting control over their internal thoughts and private, less socially expressed behaviours.

We may recognise children who externalise their need to reduce change as those who value and establish predictable routines and rhythms, have consistent and sustained friendships, like to practice something until it is right, enjoy presenting something that is finished and

polished, engage in activities they know they enjoy and are good at. Whilst we may value their conscientious approach and consistency, children and adolescents who habitually seek to reduce change in this way may over time begin to exhibit behaviours which are limiting. Behaviourally inhibited children and adolescents, those who typically respond with restraint, caution, and withdrawal to novel objects and situations, are usually timid, fearful, and shy with unfamiliar people (Kagan et al. 1988) and exhibit a heightened risk of developing social anxiety symptoms (Muris et al. 2011; Hirshfeld-Becker et al. 2008). Their caution and reticence to engage in new experiences or meet new people, is likely to result in fewer intimate relationships and fewer opportunities to develop the social competencies needed to engage in the adult world. They may be particularly inflexible when things are changed or what is expected doesn't happen, perhaps voicing their frustration in a way which presents them as stubborn or intolerant. They may opt out or refuse to engage in activities where they can't control the outcome, where there is a level of risk, or where there is little time to rehearse in preparation; this will lessen their opportunities to develop resilience. They may use passive control strategies such as obstruction, refusal, which has a negative impact on those around them and may result in others' avoidance of them. They may be overly controlling in their relationships, perhaps leaving others feeling subjugated or dominated in some way.

Other children and adolescents may internalise their need to reduce change and risk. We may recognise them as those who have high standards of personal conduct and self-discipline, who in times of transition or uncertainty respond by increasing their own internal levels of control and intrinsic order, who gravitate towards mutually close and intimate relationships particularly with their parents. Once again, there are qualities to admire, however, such a strongly internalised need for control and consistency may be detrimental. Their admirable qualities of self-discipline may become too restrictive, perhaps having negative consequences on their health. They are likely to be predisposed to the development of anxiety symptoms when faced with adverse situations, lacking the resilience to cope with risk, change or uncertainty (Brozina et al., 2006) perhaps becoming drawn towards anxious controlling behaviours of self-harm, eating restriction or obsessive compulsive responses such as checking and monitoring. They may also be more prone to internal rumination, fixating on issues and concerns, which ultimately will increase their levels of anxiety (Roelofs et al. 2009). They may become overly fixated on achieving the standards they set for themselves, perhaps resulting in perfectionism; perfectionism is a significant risk factor for a number of mental health issues (Flett & , Hewitt 2014). They may develop exclusive or collusive relationships, which may create co-dependency.

### **Self-regulation of our response to change**

An appropriate measure of change and risk is necessary for development, adaptive functioning, and survival (Morrongiello & Lasenby-Lessard 2007). Too much risk and change, as well as too little, can have a detrimental impact on children and adolescents' social-emotional development. In order to regulate their response to change, children and adolescents need to recognise the benefits of both change and stability, and the contribution each makes in supporting their healthy socio-emotional development. This requires self-awareness and self-monitoring; children who instinctively seek change, novelty and risk can be supported to anticipate those times when they are most likely to act impulsively, consider the consequences and exhibit self-control. Children who instinctively seek the predictable, familiar and safe can be supported to gradually increase their capacity to tolerate change and risk.

### **Publication bibliography**

- Ainsworth, Mary S. (1979): Infant-mother attachment. In *American Psychologist* 34 (10), pp. 932–937. DOI: 10.1037/0003-066X.34.10.932.
- Aron, Elaine N.; Aron, Arthur (1996): Love and expansion of the self: The state of the model. In *Personal Relationships* 3 (1), pp. 45–58. DOI: 10.1111/j.1475-6811.1996.tb00103.x.
- Blakemore, Sarah-Jayne (2008): The social brain in adolescence. In *Nature reviews. Neuroscience* 9 (4), pp. 267–277. DOI: 10.1038/nrn2353.
- Blakemore, Sarah-Jayne; Robbins, Trevor W. (2012): Decision-making in the adolescent brain. In *Nat Neurosci* 15 (9), pp. 1184–1191. DOI: 10.1038/nn.3177.
- Bowlby, John. (1971-1975, 1969-1980 (1981 [printing])): Attachment and loss. Harmondsworth: Penguin (Penguin education).
- Brozina, Karen; Abela, John R Z (2006): Behavioural inhibition, anxious symptoms, and depressive symptoms: a short-term prospective examination of a diathesis-stress model. In *Behaviour Research and Therapy* 44 (9), pp. 1337–1346. DOI: 10.1016/j.brat.2005.09.010.
- Casey, B. J.; Getz, Sarah; Galvan, Adriana (2008): The adolescent brain. In *Developmental review : DR* 28 (1), pp. 62–77. DOI: 10.1016/j.dr.2007.08.003.
- Chein, Jason; Albert, Dustin; O'Brien, Lia; Uckert, Kaitlyn; Steinberg, Laurence (2011): Peers increase adolescent risk taking by enhancing activity in the brain's reward circuitry. In *Dev Sci* 14 (2), pp. F1-F10. DOI: 10.1111/j.1467-7687.2010.01035.x.
- Duckworth, Angela L.; Peterson, Christopher; Matthews, Michael D.; Kelly, Dennis R. (2007): Grit: perseverance and passion for long-term goals. In *Journal of personality and social psychology* 92 (6), pp. 1087–1101. DOI: 10.1037/0022-3514.92.6.1087.
- Eisenberg, N.; Fabes, R. A.; Guthrie, I. K.; Reiser, M. (2000): Dispositional emotionality and regulation: their role in predicting quality of social functioning. In *Journal of personality and social psychology* 78 (1), pp. 136–157.
- Elliott, Elaine S.; Dweck, Carol S. (1988): Goals: An approach to motivation and achievement. In *Journal of personality and social psychology* 54 (1), pp. 5–12. DOI: 10.1037/0022-3514.54.1.5.

- Flett, Gordon L.; Hewitt, Paul L. (2014): a proposed framework for preventing perfectionism and promoting resilience and mental health among vulnerable children and adolescents. In *Psychol. Schs.* 51 (9), pp. 899–912. DOI: 10.1002/pits.21792.
- Gardner, Margo; Steinberg, Laurence (2005): Peer influence on risk taking, risk preference, and risky decision making in adolescence and adulthood: an experimental study. In *Developmental psychology* 41 (4), pp. 625–635. DOI: 10.1037/0012-1649.41.4.625.
- Grüner, Kerstin; Muris, Peter; Merckelbach, Harald (1999): The relationship between anxious rearing behaviours and anxiety disorders symptomatology in normal children. In *Journal of Behavior Therapy and Experimental Psychiatry* 30 (1), pp. 27–35. DOI: 10.1016/S0005-7916(99)00004-X.
- Higgins, E. Tory (1987): Self-discrepancy: A theory relating self and affect. In *Psychological Review* 94 (3), pp. 319–340. DOI: 10.1037/0033-295X.94.3.319.
- Higgins, E.T., Roney, C.J.R., Crowe, E., Hymes C. (1994): Ideal versus ought predilections for approach and avoidance: Distinct self-regulatory systems. In *Journal of personality and social psychology* 25 (7), pp. 783–792.
- Hirshfeld-Becker, Dina R.; Micco, Jamie; Henin, Aude; Bloomfield, Alison; Biederman, Joseph; Rosenbaum, Jerrold (2008): Behavioral inhibition. In *Depression and anxiety* 25 (4), pp. 357–367. DOI: 10.1002/da.20490.
- Kagan, J.; Reznick, J.; Snidman, N. (1988): Biological bases of childhood shyness. In *Science* 240 (4849), pp. 167–171. DOI: 10.1126/science.3353713.
- Mischel, W.; Shoda, Y.; Peake, P. K. (1988): The nature of adolescent competencies predicted by preschool delay of gratification. In *Journal of personality and social psychology* 54 (4), pp. 687–696.
- Morrongiello, Barbara A.; Lasenby-Lessard, Jennifer (2007): Psychological determinants of risk taking by children: an integrative model and implications for interventions. In *Inj Prev* 13 (1), pp. 20–25. DOI: 10.1136/ip.2005.011296.
- Muris, Peter; van Brakel, Anna M. L.; Arntz, Arnoud; Schouten, Erik (2011): Behavioral Inhibition as a Risk Factor for the Development of Childhood Anxiety Disorders: A Longitudinal Study. In *J Child Fam Stud* 20 (2), pp. 157–170. DOI: 10.1007/s10826-010-9365-8.
- Piaget, Jean; Inhelder, Bärbel (1969): *The psychology of the child*. New York: Basic Books.
- Rapee, R. (1997): Potential role of childrearing practices in the development of anxiety and depression. In *Clinical psychology review* 17 (1), pp. 47–67. DOI: 10.1016/S0272-7358(96)00040-2.
- Roelofs, Jeffrey; Rood, Lea; Meesters, Cor; te Dorsthorst, Valérie; Bögels, Susan; Alloy, Lauren B.; Nolen-Hoeksema, Susan (2009): The influence of rumination and distraction on depressed and anxious mood: a prospective examination of the response styles theory in children and adolescents. In *European child & adolescent psychiatry* 18 (10), pp. 635–642. DOI: 10.1007/s00787-009-0026-7.
- Rothbart, M. K. & Bates, J. E. (2006): Temperament. In William Damon, Richard M. Lerner (Eds.): *Handbook of child psychology*. 6th ed. / editors-in-chief, William Damon and Richard M. Lerner. Hoboken, N.J: Wiley; [Chichester : John Wiley, pp. 99–166.
- Smith, Ashley R.; Chein, Jason; Steinberg, Laurence (2014): Peers increase adolescent risk taking even when the probabilities of negative outcomes are known. In *Developmental psychology* 50 (5), pp. 1564–1568. DOI: 10.1037/a0035696.
- Steinberg, Laurence (2007): Risk Taking in Adolescence: New Perspectives From Brain and Behavioral Science. In *Current Directions in Psychol Sci* 16 (2), pp. 55–59. DOI: 10.1111/j.1467-8721.2007.00475.x.
- Steinberg, Laurence (2008): A social neuroscience perspective on adolescent risk-taking. In *Developmental Review* 28 (1), pp. 78–106. DOI: 10.1016/j.dr.2007.08.002.
- Wood, Alex M.; Froh, Jeffrey J.; Geraghty, Adam W A (2010): Gratitude and well-being: a review and theoretical integration. In *Clinical psychology review* 30 (7), pp. 890–905. DOI: 10.1016/j.cpr.2010.03.005.
- Wulfert, E., Block, J. A., Santa Ana, E., Rodriguez, M. L., and Colman, M. (2002): Delay of gratification: impulsive choices and problem behaviour