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The role of mindsets in decision-making

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Abstract:

The purpose of this paper is to aid decision-makers' work by highlighting the impacts of mindsets and their shifts across decision phases. This is achieved by a literature review and the integration of relevant scientific publications into the present article. Mindset theory of action phases (MAP) identifies four phases of decision-making: pre-decisional, pre-actional, actional and post-actional. Each phase targets efficient goal pursuit, therefore each has its dominant mindset that best fits the needs of the given phase. When in the pre-decisional phase, we are moved by our motivation to set a meaningful goal. Volition supersedes this motivation as we enter the action planning phase. The consequences are profound for decision-makers. Every phase must be implemented appropriately in the interest of optimal goal attainment. Likewise, misfits between mindsets and decision phases, too little or too much of any mindset may undermine decisions in distinct ways. Mindsets can be induced in order to temporarily adjust personal dispositions. Training people on mindsets and decision phases can improve organizational decision-making.

Key words:

mindset theory, Rubicon model, regulatory focus

A cselekvési szemléletmódok szerepe a döntéshozatalban

Absztrakt:

Jelen írás célja, hogy a releváns szakirodalmat áttekintve, rávilágítson a cselekvési szemléletmódok és azok döntési folyamat különböző szakaszaiban bekövetkező változásainak hatásaira. A cselekvési szakaszok szemléletmód modellje (MAP) a döntéshozatal négy szakaszát azonosítja be: döntés előtti, cselekvés előtti, cselekvési és cselekvés utáni szakasz. Minden egyes szakasz célja a hatékony célélérés. Így mindegyiknek jellemző szemléletmódja van, amely illeszkedik az adott szakasz szükségleteihez. A döntés előtti szakaszban a hajtóerőnk a motiváció: hogyan jelöljük ki értékes célokat. Ezt követően a cselekvés tervezési szakaszba lépünk, melyben a motiváció szerepét átveszi az akaraterő. A következmények minden döntéshozó számára meghatározók. Minden egyes szakaszt megfelelően kell végrehajtani az optimális célélérés érdekében. A cselekvési szakaszok és a szemléletmódok közötti rossz illeszkedés, adott szemléletmódok túlzott dominanciája különböző módokon áshatják alá a döntéshozatalt. Az adott személyre általánosságban jellemző szemléletmód átmenetileg módosítható.

Kulcsszavak:

MAP, Rubikon modell, regulációs fókusz

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Introduction

Many of us are fascinated by the notion of decision-making. We may sometimes find it rational, while on other occasions it seems puzzling to us. Mankind has ever tried to comprehend the mechanisms of human decisions. From ancient Greek philosophers through sovereigns, military commanders, scientists, modern managers to laymen have tried to reveal the secrets of decision-making. The concept of rational economic man had prevailed most of the 20th century until behaviourism took root. Behaviourism argues that besides rationality – which itself is more compound than we previously thought – there are many other factors that shape our decisions. Such factors are motivation, self-regulation, emotions, subjectivity and a multitude of others. The present paper deals with one of them: the changes of decision-makers' attitude throughout different phases of decision-making. It casts light on why and how our behaviour alters as we cross the boundary of each decision phase.

Mindset Theory of Action Phases

Mindset theory of action phases (MAP) focuses on human goal striving. It is based on the distinction between **motivation** and **volition** in the goal-striving process. Individuals see goal achievement as a series of consecutive tasks that must be solved in order to achieve goals. Before setting a goal, motivational principles apply. Their aim is to select a proper goal – one that is challenging and inspiring but still achievable. After the goal is set, volition replaces motivation. This promotes goal implementation. Mindset theory states that different cognitive procedures – cognitive orientations – are activated before and after setting a goal. Hence, we can refer to the first one as “**deliberative mindset**” and the second one as “**implemental mindset**”. The objective of each mindset determines its features. It governs what kind of information we prefer to process and how we analyse it. The course of action can be divided into four consecutive action phases:

- **Pre-decisional phase:** setting preferences among possibilities considering their desirability and feasibility. Since our desires commonly surpass our possibilities, we must achieve a compromise between these two. This force drives our goal setting: we compile our desires into goals bearing in mind the restraints. The questions in this phase are: “What should I want to achieve? Why?”.

- **Pre-actional phase:** having set the goal, our goal-directed behaviour commences. We must decide on what action to implement, when and how, in order to achieve our goal. It can be simple when the planned actions are simple, routine and well-practiced, but it can also be complex in unclear situations. The main issues here are: “where, when and how”.

- **Action phase:** this is the time for persistent and determined goal-directed action.

- **Post-actional phase:** after carrying out the chosen action, we must consider whether the goal is achieved, or we must continue our striving. The questions here are: “Am I there yet? Should I continue striving?” (**Figure 1.** The Rubicon model of action phases)

All the above phases have one common objective: to successfully realize meaningful goals. On the other hand, our cognition is grounded on different principles in each phase. The pre-decisional and the post-actional phases (the first and the last phases) are directed by motivations, whereas the pre-actional and the action phases (the phases in between) are volition driven.

Deliberative mindset makes us receptive of a wide range of information. This stage is characterised by:

- No commitment to any options yet.
- Impartiality to options.
- Open-mindedness. Consideration of possible alternatives, outcomes, chances, desirability, feasibility. Broad information processing.
- Two-sided information processing: the pros and the cons. This balanced view does not strengthen goal attitude.
- Realistic estimation of abilities, the degree of control over events and the difficulty of the task.
- Realistic view: performance estimation is based on past performance.
- Broad working memory: a wide range of memory can be recalled.
- Lower task performance.

The induction of a deliberative mindset can be helpful for people who lean to overconfidence.

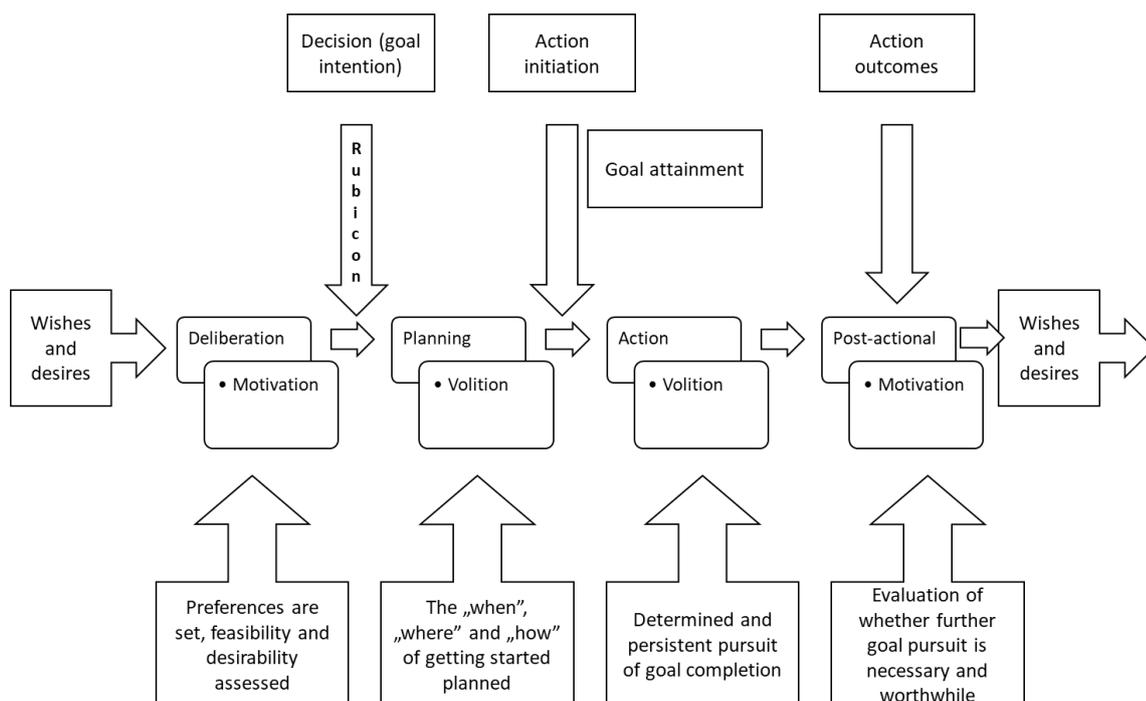


Figure 1. The Rubicon model of action phases. Adapted from: (Gollwitzer 1996)

The pre-actional (planning) and the action phases trigger **implemental mindset**. These phases tune us to focus on goal achievement. The characteristics of this stage:

- Commitment to the selected goal. It is now vital for successful implementation.
- Tunnel view: our sight narrows only to information necessary for designing and carrying out actions for the successful completion of the selected goal. Selective information processing sets in.
 - Narrow-mindedness. Too much open-mindedness in this phase may be detrimental, since it may reduce commitment and distract focus away from implementation – thus it potentially derails goal-driven actions.
 - Desirability and feasibility issues are set aside.
 - Partiality to the selected option.
 - Over-optimism about feasibility.
 - Rampant optimism: performance expectation neglects past performance.
 - Overestimated goal desirability.
 - Overestimation of our control over events and our abilities.
 - Underestimation of the difficulty of the task.
 - The onset of positive illusions: the feeling of invulnerability to risks.
 - Narrow working memory: the availability of non-implementation-related memories is limited.
 - Guides against losing track in case of a behaviour conflict (e.g. when there is a binary choice option – a mutually exclusive choice between two options – continuously available).
 - Greater persistence.
 - Boosted task performance.
 - Biased information processing further strengthens goal attitude strength. Attitude strengthens even to goal-unrelated objects. This one-sided evaluation – considering only the pros without the cons – is indispensable for attitude strengthening.

Implemental mindsets generally promote goal achievement (e.g. by reducing distractive thoughts in the implemental phase) but they sometimes inhibit optimal decision-making (e.g. by ignoring vital pieces of information due to narrowed vision). Individuals in the implementation phase are less ambivalent and more accessible even towards objects that are unrelated to the goal set. The stage dependent filtering of information is **cognitive tuning**. Besides many differences, there are also similarities between the two mindsets:

- The more a person is involved in a task the stronger the given mindset becomes.
 - They have a **temporal radiation**: the mindset does not fade away instantly when the corresponding stage is finished. Due to this moment of **inertia**, it carries over to the subsequent stage for some time.

Our preoccupation with the incentive value of available goal options in the pre-decisional phase and the prevalence of “how to implement” the corresponding actions in the next phase is a phase congruent information processing. There is a time for making decisions and there is a time for their implementation. Effective action control requires the activation of the proper mindset. People are most efficient when they are let delve into the mindset required by the situation. Reasoning must also be adjusted with a view to the current stage of action phases. People should not only be expected to commit to goals but must also be equipped with an adequate toolbox of preliminary deliberation.²

The Rubicon Model of Action Phases

The Rubicon metaphor refers to one-time Roman emperor Julius Caesar’s crossing with his legions the river Rubicon on his march against Rome. As a result of numerous past military coups, the law forbade any Roman army to cross this water – on pain of death. Caesar knew that crossing the river was his point of no return. After this action there was no way back but to conquer Rome and grab control over it as dictator – thus forcefully legitimizing his trespassing of the law. Having crossed the river, he is said to duly announce: “the die is cast”. Analogously: having passed the deliberative phase, we **irrevocably** enter the volitional phase.³

The Rubicon model is grounded on the notion that thoughts are undone much easier than actions. Also, at its core is the revelation that goal oriented behaviour incorporates numerous phases (deliberative, implemental, actional, evaluative) each governed by different principles.

Further features of the Rubicon model:

- Deliberation does not always precede action. Many of our actions have roots in the past. In such cases classical deliberation is unnecessary.
- Goal setting is not always followed by action planning. Planning is not needed in simple cases, but it is a must when goal achievement is threatened by circumstances. The initiation of planning may be awkward
 - o if the action required the creation of special circumstances,
 - o in the case of a rare opportunity,
 - o decision among competing goals is pending.
- Overlaps between stages are possible.
- Goals are hierarchical. Subordinate goals are set in order to achieve superordinate goals. Superordinate goal feasibility and desirability should be assessed prior to that of subordinate goals. Strong attachment to superordinate goals will result in high commitment to subordinate goals and resolute implementation intentions.⁴

² Gollwitzer 2012., Fujita et al. 2007., Brandstätter, Frank 2002.

³ Keller et al. 2019., Hamilton 2016.

⁴ Gollwitzer 2012.

Planning

Planning initiates implemental mindset and thus, it has a beneficial impact on subsequent actions:

- When individuals plan their actions, they plan not only what actions to perform but also what kind of difficulties they can expect and how they will overcome them. These designs are recalled in the implementation stage. Thus, planning further increases commitment in the ensuing action phase.

- Planning facilitates the **shielding** of goals: it increases resistance to forces that would otherwise hamper goal attainment. Implemental mindset places the task in the centre of attention while pushing distractions into the periphery. This facilitates people to ward off distractions.

- It initiates perceptual readiness: people will be more receptive of useful task-related information.

- It establishes behavioural readiness: people will be ready to act when opportunities – or hindrances – arise.

- Mobilized effort enables people to escalate their efforts when needed.

- Planning wards off distractions: after proper action planning, individuals are less prone to be derailed by disruptions. When disrupted, they are likely to successfully resume goal pursuit.

- It triggers illusionary optimism: supresses dysfunctional thoughts about goal feasibility and desirability.⁵

While **goal intentions** are about the outcome (“I want to realize outcome X”), **implementation intentions** are “if-then” plans: “if critical situation X happens then I will perform goal-directed response Y”. Its benefits:

- Allowing goal-driven **automatic responses** that can combat even the most goal adverse situations.

- Facilitating quick detection of situations described in the “if-then” plan.

- Making responses quicker and less effort demanding.

- Increasing commitment.

- Possible handicap: it may result in suboptimal decisions when wilful attention would be necessary.

Making multiple plans regarding the same goal instead of a single one weakens the link between the situation and the response.⁶

Implementation plans devised in the format of “if-then” plans can effectively lessen the gap between intentions and behaviour. Since too much deliberation in the implemental phase can hinder goal pursuit, the “if-then-why” does not seem to be useful at this stage. Applying the “if-then” thinking regarding past events (consider

⁵ Gollwitzer 1996.

⁶ Keller et al. 2019.

how a past action could have been more sound) may strengthen the motivation regarding subsequent tasks.⁷

A very typical workplace situation is when a small group must collectively solve a complex problem. Intention-action gaps exist not only at individual level but also at group level. Groups may be unable to achieve their collective goals however much they are committed to them. Even if they know the actions that should be done in order to reach the goal, they are oftentimes incapable of implementing them. Groups often fail to reach their full performance potential due to suboptimal collective goal striving. They may face competing group goals or competing individual goals. Collective goal striving can be improved as well if collective action control is exercised alongside an “if-then” format implementation plan.⁸

According to the **delegation hypothesis**, people intentionally make “if-then” plans and then delegate control of goal-directed behaviour to preselected situational cues with the intention of goal attainment. This creates **strategic automation**: immediate and efficient actions without conscious intent. Besides, it also increases the importance of heuristics and cognitive biases (such as stereotyping) – which can sometimes be adverse to goal attainment. Implementation intent is moderated by:

- **Commitment**: how strongly the individual is committed to some correspondent superordinate goal (positive correlation).
- **Perceived self-efficacy**: the belief that we can organize and execute our actions needed for successful goal achievement (positive correlation).
- **Socially prescribed perfectionism**: high standards expected from us by others (negative correlation).
- **Conscientiousness**: less responsible people benefit more from planning – due to its bigger impact on their implementation intentions – than their conscientious counterparts.⁹

Action Crisis

Action control is the maintenance and protection of an activated intention. Due to possible **attention-action gap**, effective self-regulation does not guarantee efficient action control.¹⁰

Two major categories of volitional issues are:

- People frequently procrastinate their exertion of effort. Thus, they delay the start of the action phase.
- Under-commitment to goals is customary. This results in immature disengagement in the face of troubles, yielding to distractions and being unable to resume goal pursuit once disrupted.

⁷ Gollwitzer et al. 2009.

⁸ Wieber et al. 2012., Wieber et al. 2013.

⁹ Gollwitzer, Oettingen 2011., Brandstätter et al. 2001.

¹⁰ Kuhl 1987.

With the increase of the perceived difficulty of a task the effort exerted also increases. When the level of effort exertion reaches a cut-off level – the level beyond which a person loses interest in the goal – the task is abandoned and further struggle ceases. At this point, the person **disengages** from goal pursuit. This level can be very low in case of cumbersome tasks and high when an attractive one is pursued. People of an implemental mindset are likely to operate at high **cut-off levels**. They show a great level of persistence and mobilize their efforts when difficulties arise. Implemental mindset promotes resumption of goal pursuit in case of disruptions.¹¹

Action crisis is an intrapsychic conflict that occurs when actions seem to be inadequate to reach the goal or the goal appears to be dissatisfying. In such circumstances, the individual may **redeliberate** whether to proceed with striving or to forsake the goal altogether. The greater the desirability and the greater the perceived feasibility of the goal, the higher the chance of a renewed goal commitment in such cases. Redeliberating may even increase commitment. The earlier the action crisis occurs, the more likely goal disengagement is.¹²

Cognitive dissonance sets in when we experience too many or too strong dissonant cognitions versus consonant cognitions. The action-based model of cognitive dissonance suggests that the biased information processing of the implemental mindset serves **dissonance reduction**, therefore it is functional. It is a vital operation that transforms decision into effective and **unconflicted actions**. Dissonance is decreased by increasing the value of the chosen alternative and also by devaluing unselected options.¹³

Action crisis is a decisional conflict that is often generated by goal attainment problems: one must decide whether to continue goal pursuit or to succumb. People tend to overcome goal attainment issues as long as their perceived goal desirability and feasibility does not drop, and they have sufficient **self-regulatory** resources. On the other hand, the decline of such conditions is likely to be a precursor of an approaching action crisis. These ambiguous situations create frustrations that may make abandoning the goal a viable option.¹⁴

There is an **asymmetrical reciprocity** between an action crisis and goal feasibility versus an action crisis and goal desirability. In the case of an action crisis, we tend to decrease expected feasibility less than we devalue goal desirability. The increase of goal desirability also increases life satisfaction – but only when the goal is feasible. On the other hand, the devaluation of unfeasible goals supports emotional relinquishment, which is a self-protective measure in such cases – since in this situation it will increase well-being.¹⁵

¹¹ Gollwitzer 1996.

¹² Gollwitzer, Keller 2016.

¹³ Harmon-Jones, Harmon-Jones 2002.

¹⁴ Herrmann, Brandstätter 2015.

¹⁵ Ghassemi et al. 2017.

Disengagement from a goal is not a single event, but a **process**. When issues and drawbacks relating to a goal pursuit accumulate (action crisis), we perform a **cost-benefit analysis**. In such a state of mind, we become more receptive of cost-benefit related information not only regarding to the goal affected by the crisis but also to unrelated areas. The chance of a decision conflict is especially high in cases when the cost of continuing goal pursuit becomes roughly equal with its anticipated benefits. Redeliberation may have two outcomes:

- We disengage from our initial goal. In this case, cost-benefit analysis can potentially reveal other, more advantageous decision alternatives.
- We may recover our initial mindset, in which case our original goal chasing may gather new momentum.¹⁶

In consonance with mindset theory, high self-view people perform self-assessment orientation in the deliberative phase and self-enhancement in the implemental phase. By contrast, low self-view individuals undervalue themselves in both phases. Thus, their goal setting is unrealistically low, and their goal achievement is unsuccessful. Every such new experience further aggravates their low self-view.¹⁷

Self-control

Enough **self-control** moderates the relationship between intention and action. Self-control in itself does not have a motivational power: it does not predict whether action will be taken or not. However, it protects volitional capacity by preventing action related fear, doubt and action aversion. Thus, it increases the likelihood of successful goal pursuit.¹⁸

Deliberative phase fosters pessimism regarding one's own capabilities, the environment, chances and goal desirability. It results in a more careful estimation of future performance. The contrary is true for an implemental mindset. These attitudes feed back to the self-regulation by either increasing or decreasing it. Thus, performance expectations become self-fulfilling: people with deliberative mindsets will underperform others who have implemental mindsets.¹⁹

Goal-directed thoughts, feelings and behaviour may be wilful, but they can also emerge without conscious intent. The same way, we make assumptions on the intentionality of other people's thoughts, feelings and behaviour. Behaviour can be a result of volition but it can also be unwilling.²⁰

Exertion of self-control generates a narrow mindset. The narrow mindset induced by exercising self-regulation makes focusing on a parallel task more demanding. Since our self-regulatory resource is limited, there is a relationship between mindset

¹⁶ Brandstätter, Schüler 2013.

¹⁷ Bayer, Gollwitzer 2005.

¹⁸ Van Gelderen et al. 2015.

¹⁹ Armor, Taylor 2003.

²⁰ Bayer et al. 2003.

and self-control. The depletion of self-regulatory resource (ego depletion) has an impact on our mindset.²¹

Risk Attitude, Optimism-Pessimism

An implemental mindset fosters **promotion regulatory focus**. Whereas this optimistic risk attitude can be beneficial for goal attainment it also has its hazards. This mindset sometimes makes people forego contingency planning, which results in the lack of any exit strategy and prohibits disengagement when unsurmountable emergencies arise. Even worse, it possibly hinders the detection of emergencies and thus, may lead to the irrational escalation of commitment. This can clearly cause losses or even a catastrophe. This is an ordinary weakness of the entrepreneurial mindset. Entrepreneurs strive to transform their beliefs into reality. It implies that they must work in unpredictable circumstances; therefore they must unceasingly pursue opportunities and at the same time detect environmental changes that may render their goals unfeasible or undesirable. Numerous Mount Everest disasters that have led to avoidable casualties due to decision mistakes have a lot in common:

- Extreme level of goal commitment;
- Great pressure on the decision-maker to succeed;
- The lack of contingency planning;
- Unawareness of increasing risk exposure;
- Inability to redeliberate;
- The (mis)perception of goal proximity;
- Due to the above issues, the inability to disengage.²²

Different mindsets in the pre- and the post-decisional phases generate different thoughts in the decision-maker. This is moderated by the achievement motive. Success-oriented people are pessimistic before they make decision and optimistic after it. This reverses in the case of failure-oriented people. Thus – with the consideration of success or failure orientation – the pattern of thoughts may indicate the phase the decision-maker is actually in. Incentive and expectancy related thoughts dominate the pre-decisional phase, whereas these become less frequent in the post-decisional phase versus implementation-oriented thoughts. There are exceptions, though:

- If a task requires too little planning, incentive-oriented thoughts may hold out even in the implementation phase.
- If the decision-maker had to choose among nearly identical options, she/he may continue deliberation even in the implemental phase. The purpose of this reassessment is the reassurance of the choice made.

In the case of success-oriented decision-makers, positive incentives prevail at the beginning of the deliberation, but approaching the end of this phase negative

²¹ Bruyneel, Dewitte 2006.

²² McMullen, Kier 2016.

thoughts take over: the decision-maker takes the role of the devil's advocate and performs a strong reality check on the option he/she is preparing to choose. Failure-oriented individuals show a complete reversal. They are more optimistic when they choose, and pessimistic when they implement. This may be dysfunctional for goal success: they may disengage in the face of difficulties before the goal is realized. This is an extension to the original mindset theory of action phases.²³

The induction of an implemental mindset improves goal related information processing ability. This can be beneficial to decision quality under uncertainty, especially when decision rules are complex, or the stakes are high (e.g. military officers in combat or medical professions).²⁴

When people are interrupted in their activities, those who are in the deliberative phase tend to base their performance expectations on their past achievements and assess future performances more realistically. If they must choose at this point among different tasks, they will select simpler ones. Being overly optimistic in the implemental phase can backfire, since it makes people overestimate their capabilities and underestimate difficulties. This may be dysfunctional for goal achievement. It may also lead to non-productive persistence. In such cases, people struggle irrationally longer with unresolvable tasks before they finally manage to disengage. Optimism can be beneficial only when it is selective, and is at the right level. It is also observed that the mindset of a task in progress radiates out to other, unrelated, parallel tasks. Hence, two tasks which are at different phases may have a mutual impact on each other's mindset.²⁵

Mindsets are adaptive. Despite their more positive illusions, people in implemental mindsets can restrain both their goal settings and performance expectations. This adaptation allows them being optimistic without getting into trouble. Besides being more confident in goal attainment, the right level of optimism does not make them vulnerable to failure.²⁶

Both deliberative and implemental mindsets serve the purpose of goal achievement. Each is functional under given circumstances. Too harsh success orientation and excessive failure orientation can both prohibit the individual to switch between mindsets. This inability may make success orientation or failure orientation constant. A deficiency of mindset theory is that it does not take into account whether a decision-maker is failure-threatened or success-motivated. The inclusion of individual differences to risk into mindset theory might be a great development. People could be trained how to apply the right mindset even despite their dominant attitudes to risk.²⁷

²³ Puca, Schmalt 2001.

²⁴ Li et al. 2019.

²⁵ Puca, Schmalt 2001.

²⁶ Puca 2004.

²⁷ Puca 2005.

People in an implemental mindset give shorter – but equally biased – time predictions for task accomplishment in comparison with individuals who are in a deliberative phase. The task thus made more challenging increases motivation which results in earlier accomplishment versus people in a deliberative mindset.²⁸

Implemental mindset induces the illusion of control over events while deliberative mindset hinders it.²⁹

Conclusion

Crucial aspects of why a decision-maker shows different behaviour patterns through different stages of decisions are revealed by mindset theory of action phases. Our decisions comprise four stages: pre-decisional (deliberation), pre-actional (action planning), actional and post actional (evaluation). Each of them is naturally designed to promote goal attainment and therefore each necessitates a different mindset. While motivation plays a major role in the pre-decisional and the post decisional phases, volition is paramount in between. The open-minded state of pre-decisional phase supports optimal goal setting. The close-minded state of the pre-actional and actional phases ensures sufficient commitment to the goal set. Once we have proceeded to the second stage, there is – normally – no way back to the former one. The theory has imperative messages for decision-makers. It is useful to know the phases our people are in since this helps predict their behaviour and even their situational weaknesses. Each phase is essential for successful action and therefore it should be given a proper weight, time, and effort. We should not rush to exit the deliberation phase prematurely. We should be careful when traversing phases. A mismatch between our actual mindset and the needs of current decision phase undermines decision-making. Action planning must be done properly – including contingency planning – in order to avoid serious irrational losses by possible over-commitment. While irrational escalation of commitment might cause great peril – by the activation of sunk cost bias – insufficient commitment can be equally harmful – by premature goal relinquishment. When a choice is made, we must let – and support – people commit to the goal and pursue it. Managers must be sensitive to the needs goal attainment: they must switch their teams into action mode when prolonged deliberation offers no more merits. They also must perceive when escalated goal pursuit becomes harmful, and in such cases, they should consider the abandonment of the action phase and the reignition of the deliberation phase. This is in the interest of the organisation. Reconsideration may produce different outcomes. It may result in the adjustment of actions, the realignment of goals or even the complete disengagement from the given goal. In real life this is very hard. Due to office politicking, brutal power games, and blaming culture it is often impossible for a decision-maker to disengage from a derailed goal without jeopardizing his/her own

²⁸ Brandstätter et al. 2015.

²⁹ Gollwitzer 2003.

job. Organisations often pursue unattainable, perilous goals because they do not dare to admit that 'mistakes have been made'. This inertia causes heavy losses, unnecessary human casualties in the case of military campaigns.

Post-actional evaluation is vital if we want to learn from our actions. We can offset personality imbalances by inducing mindsets purposefully: making overconfident people deliberate and low self-view people act. People can be trained to understand their own mindsets and improve their decision-making behaviour.

I use the implications of mindset theory in my current ongoing empirical research on operative organizational decision-making. The phases of the organizational decision-making process (preparation, choice, execution, ex-post evaluation) are related to action phases. The research examines the link between the quality of each of the decision phases and the overall outcome of the decisions at organizations.

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