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Knowledge in Neuroscience Can Help Us Avoid Underperforming Leaders

Bertil Engelbert

Additional information is available at the end of the chapter

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Abstract

The aim of this review is to present a new thinking for the evaluation and recruitment of leaders, to avoid underperforming leaders. To understand the problem and better predict the outcome, we need to know what controls the decisions of leaders. State of the art in psychology and neuroscience today has tools to perform this. These tools do not include the traditional traits. Our decisions are controlled by a few information processing networks, where cingulate cortex and insular cortex probably have a controlling role. This is also where we would expect our first individual impressions to be stored. The consequences of having different early experiences have been documented in attachment research, including several longitudinal studies. This research has contributed to the knowledge explaining why some leaders underperform or are detrimental, and it can be used for predictions in a leadership context. A significant difference between persons who had a rich early development and those who had a poor early development is their abilities to handle complexity and uncertainty, to have a good moral judgment, to understand other persons, to have integrity in conflicts, and to distinguish between appearance and reality. The five basic features that are focused are: trust in others, trust in self, flexibility, truthfulness, and responsibility.

Keywords: causes of dysfunctional leadership, predicting dysfunctional leadership, influences of early development, basic leader criteria, truthfulness and responsibility

1. Introduction

The aim of this review is to present a new way of thinking for the evaluation, recruitment, and development of leaders, and the main focus is to avoid underperforming leaders.

Leadership involves the handling of a very wide range of environments and situations. The leadership literature is overloaded with (mostly anecdotal) writings about how to handle this.

However, the problem is that leaders with prosperous features unexpectedly underperform or fail too often. Therefore, this review will focus on how to avoid underperforming leaders.

A leader may be underperforming or even detrimental for the organization in several ways, a few examples are the following [1, 2]: by making bad decisions because of selfish priorities and/or lack of competence, by embracing an entourage of incompetent and often detrimental coworkers, by neglecting, suppressing or even bullying competent and loyal employees, and by being a bad role model, and worst of all, such leaders often are experts in disguising their true intentions [3–6]. This review will describe a few ways to get a look behind a false front, which often will reveal some of the (potential) faults.

The issues addressed in this chapter: In order to get the right person for a certain position, substantial resources are invested in professional solutions. Yet, there are a few troublesome facts to observe. The issues that will be addressed in this chapter, are the following: (A) too often, leaders do not meet self-evident expectations on responsibility and truthfulness when they get more power (and those deficiencies were not foreseen in advance) [1, 7]. (B) There are not sufficient methods available to specify what fundamental requirement should be met, by a new person on a certain position [4, 8]. (C) There are not sufficient methods available to reliably predict features or deficiencies of a person (i.e., if they were not clearly exposed on the current or previous positions) [4, 8].

This review will not present a description or a formula showing “how to do it,” because there is no such formula, but will offer knowledge to understand the problem and to better predict the outcome. To successfully do this, we need to know more about what controls the decisions and the behaviors of a leader. State of the art in psychology and neuroscience today may actually give us some tools to do this.

This review does not refer to the traditional traits. The traditional traits and leadership styles that often are referred to in the literature about leadership, management, and organizational development [3, 6, 9, 10] may characterize important aspects of leadership; however, they have not been proven to be sufficient criteria for predicting leadership [7, 11–13]. The reason for this insufficiency may be that the traditional traits “emerged from the descriptive and lexical approaches to personality, which were aimed mainly at characterizing how people’s behavior is described in everyday language” ([14], p. 203). In other words, the traditional traits were based on what people considered to be important. However, a careful examination shows that there are important factors of which people were not aware. The traditional perception of leadership has also been questioned as lacking a deeper analysis [4, 8].

1.1. A concept founded on basic features

1.1.1. A basic construct

The concept that this review will present is based on knowledge about early shaped features, features that are basic in the personal development. Some of the abilities that may be distinguished by this concept include the abilities to handle complexity and uncertainty [15, 16], to have an intrinsic sense of good moral judgment [17], to spontaneously cooperate with and understand other persons [18, 19], to have integrity in conflicts [16], and to distinguish

between appearance and reality [20]. As these abilities are important in most decisions and behaviors of leaders [1, 3, 6, 21], important leadership qualities may be predicted using experiences from research regarding the early development of a person. In this chapter, these abilities will be called *General leadership abilities*. This approach would signify a new way of thinking for the evaluation and recruitment of leaders.

1.1.2. The origins of important human features

During the last decades, a consensus among scholars in the neuroscience field have developed (with increasing refinement as research methods have improved) that our decisions and actions are controlled by a few information processing networks in the brain. Two of the brain regions that are members in these networks, the cingulate cortex (CC) and the insular cortex (IC), are activated much of the time [22, 23]; you may assume that they have a central or even controlling role in these networks.

1.1.3. Where our mental development started

Looking back in evolution, when the mammals emerged around 220 million years ago, the development of a new and more advanced brain started at the CC and IC; the neocortex, with six neuron layers instead of three [24]. (The mammals most likely needed to be smarter because they gave birth to an off-spring who demanded more care.) Because these structures (CC and IC) were developed early in the mammal evolution, they also are ready for use early in the individual postnatal development. Therefore, this is where we would expect our first social impressions to be stored [25, 26].

1.1.4. A well-documented development

Caregivers are very different and give their infants very different early impressions, which are stored in relevant places in the brain, with CC and IC (the becoming control center) as coordinating units [26]. The consequences of these differences have been documented very thoroughly by scholars in the attachment theory field, during the last four decades [27]. The early attachment to a caregiver, which is an effect of these first impressions, can be measured by a well specified method; the Strange Situation Procedure (SSP) [28]. This research also includes several longitudinal studies relating the early attachment status to different aspects of adult life [29]. Although attachment is not an issue in leader development, attachment research has contributed with valuable knowledge about the development of personality [16, 17, 30]. This knowledge can explain why some leaders underperform or are detrimental, and thus, it can be used to make predictions in a leadership context.

1.2. Five basic features

Important parts of this concept are a few basic features that can help us to indicate the general leadership abilities that were mentioned above, features that emerge from fundamental, developmental and controlling processes in a person. The basic features are *trust in others*, *trust in self*, *flexibility*, *truthfulness* and an *intrinsic sense of responsibility*.

The reasons why these features can be believed to be particularly important are because the three first items can be detected very early [28], the first four items are established terms in attachment research [27], they are all fairly stable during life [19, 20], their brain networks have been indicated by neuroscience (with important nodes in CC and IC) [26], and they are important parts of our adult behaviors and decisions. Hence, one may assume that they are important also for leadership behaviors and decisions.

1.2.1. Features important in trusted positions

Two of these features, truthfulness and an intrinsic sense of responsibility, are particularly important in trusted positions: An essential part of leadership success relies on the ability to convince other people about the leader's visions and goals [21]. Then, it is very important that this ability will not be misused at the disadvantage of the organization.

1.2.2. These features are not statistically orthogonal

These basic features are developed in the same environment (the brain) and, although they may belong to different networks, their developments are highly intertwined. Therefore, the developments of these features can be assumed to progress in similar amounts and directions: When compared between adult persons, they are internally fairly covariant [20], which can be used to detect features that are not apparent at first sight. This is an important property since such indirect indications often are the only way to detect poor abilities that are disguised.

1.3. A few terms explained

In the following description a few terms that are important will be used; "adaptive model," "static schema," and "life management support," that are explained here before they are used:

1.3.1. Adaptive model

An *adaptive model* in this chapter is an early founded dynamic mental structure—like a flow-chart—that guides a person on how to decide and act in a situation [18]. The guiding output may depend on the current state of things or a predicted future outcome, and so on. Persons who habitually use adaptive models often enhance their general ability to handle complex problems [25]. An adaptive model may be more or less well connected to the formal and informal structures in the environment, and in different ways, as is described as "Life management support" further down.

1.3.2. Static schema

A *static schema* is a fixed pattern of behaviors, procedures, attitudes, habits, symbols, templates, and emotions that are used in or are applied to the current situation [18, 31]. A static schema may also include interpretations of others' behaviors, attitudes, or symbols [25]. Everybody has a repertoire of schemas that are used in appropriate contexts. Some people (almost only) rely on a vast amount of static schemas and others are more inclined to use flexible models.

1.3.3. *Life management support*

During childhood and adolescence, a responsive parenting consists of both emotional interaction and different ways of giving the youngster some prerequisites for a good adaptation to the world in which she or he (s/he) is going to live [30, 32, 33]. These prerequisites include some moral and social guidelines (both formal and unspoken rules), knowledge about society and how working life functions, what life goals that may be worth striving for, how to best handle conflicts, troubles and misfortune, and so on. The optimal spectrum of influences varies with age and circumstances, and particularly during adolescence, the same sex parent is commonly the most important in supplying this support [33]). In this the picture of the self, abilities, personal significance and rights that the parents usually imprint is included [32]. Here this will shortly be called *Life management support* (which does not include emotional interaction).

1.3.4. *General leadership abilities*

This term was explained earlier, in the last part of the paragraph in Section 1.1.1.

2. How important features are shaped

This section describes some of the theoretical support for the predictions that can be made. This could easily be perceived as much too detailed if all the scientific evidences are presented. So here, a shortened and popularized version will be presented and the reader is asked to study the relevant details in the referred literature.

2.1. The early development

As can be understood from the previous description, the adult decisions and actions are to a high degree controlled by early established processes. You could say that the decisions you make emerge from those processes. When you are born, your brain is a fairly “empty space” with regard to knowledge about the environment. An essential part of the infant brain development is ingestion and structuring of impressions. However, it is the environment, the persons who “deliver” the impressions, who determine the content of the infant brain and its future functionality [18]. If the empty space is not filled with data that fit the intended use (which is to lay a foundation for the following development), the functionality will be severely impaired. Here, some of the typical basic consequences will be highlighted, that may occur when the infant brain is “filled with data—or not.”

When discussing the very initial development of the personality one can think of the starting procedures of a computer, which in essence will determine the level of final functionality:

2.1.1. *An analogy*

When a computer is powered on, the processor reads and stores in memory a big set of instructions that is called the operative system (OS). The first part of the OS that is loaded is called the

Kernel, which is an administrative center for the different functions that the OS can perform. If the Kernel works well, then several programs and tasks that run at the same time is a natural thing (which is called multitasking), and seamless integration of applications is not a problem.

2.1.2. The storing of initial instructions in humans

If the caregiver is responsive, comforting, and predictable to the infant (for a description of caregiving, see Appendix A), then the first experiences will build up a basic model of how the environment functions. Bowlby [34] called it an internal working model (IWM). This model will control in a flexible way—based on an understanding of people (and objects)—how impressions are handled, and it will have a guiding role for the person during the rest of the life [34]. This IWM will become an Adaptive model, as described previously.

2.1.3. And if the kernel is not complete?

If the OS Kernel misses some important functionality, the computer will not work well. Such a computer has unwanted limitations and only one program or task can run at a time.

2.1.4. The infant with an inattentive caregiver

The inattentive caregiver (see Appendix A) does not communicate much with their infant. With a poor early development, this infant gets little opportunity to build a useful model of the environment [26]. Therefore, this infant will have a difficulty to understand the caregiver's intentions [19]. Much of the internal control will have to rely on static "rules" or schemas (see Appendix B), which means that this will become an inflexible child [18]. Later, as an adolescent and adult, s/he may perceive cognitive stability (i.e., rigidity) as security and appears to have a difficulty to have more than one thought or focus in mind at the same time [16]. S/he wants to be loved, admired or at least accepted (to belong) but does not quite understand when s/he is, and s/he has a difficulty with closeness [16].

2.1.5. The infants with an inconsistent, rejecting, or harmful caregiver

These caregivers give their infants experiences that often are contradictory or even frightening [35]. Their infants get little opportunity to build a useful model of the environment [18]. Hence, they will be prone to misunderstand other persons' intentions [25]. Although their experiences may be very different, their basic features have similarities in common (low understanding of others' intentions and low flexibility) [35], so for simplicity, here, these children will be sorted within the group of "poor early development."

2.2. The further development

2.2.1. Influences from genetics, epigenetics, and biochemistry

The less responsive the caregiving is the stronger impact will the influences from genetics, epigenetics and biochemistry have. The less responsive the parenting is the stronger impact will the influences from peers, gangs and media have [32, 33].

2.2.2. *The early development influences the further development*

Under the same environmental circumstances, persons with different early developments may make significantly different experiences, which also influence their further development, in line with the following examples:

Regarding trust in others [17, 18]:

- A child with a rich early development trusts people (trusting people is a consequence of a rich IWM [19, 34]) and verifies time and time again that most people can be trusted.
- A child with a poor early development (i.e., a poor understanding of others' intentions [19]) distrusts people and verifies time and time again that most people cannot be trusted.

Regarding attitude toward difficulties [16, 18, 36]:

- A child with a rich early development meets difficulties with renewed efforts to achieve the goal, and the adult with rich early development sees failures as experiences that enhance curiosity on how to solve the problem.
- A child with a poor early development meets difficulties with frustration and a refusal to continue (i.e., learns to avoid uncertainty), and the adult with poor early development sees failures as negative and signs of incompetence.

That is, in the further development their early acquired states of mind are amplified toward either more openness and flexibility, or more covertness and rigidity respectively [18]. These developments are reinforced by the fact that, normally, parents continue their initial care-giving attitudes: the responsive caregiver normally becomes a responsive parent (who gives good life management support) and the inattentive caregiver normally becomes an inattentive parent [17].

However, life is not always a straight journey. Many unexpected changes can happen (like illness, death, changed marital or economic status) and a few likely consequences of such changes will be mentioned further down, in a much simplified and schematic way.

2.2.3. *The developmental outcome*

A common and significant difference between adults who had a rich early development and those who had a poor early development is to what extent their decisions and behaviors are controlled by an adaptive model or static schemas, that is; by intrinsic or extrinsic guidelines. This difference is apparent in their general leadership abilities and is exposed indirectly in a few ways that the person commonly is not aware of.

When performing a careful analysis of a particular interview, according to certain strict rules—like it is done in the Adult Attachment Interview (AAI) [29] (which is the best method developed to for this purpose [37])—this state of mind may be determined by way of certain criteria.

3. Integrating early and later development

What you see of an adult person is mostly an “attitude,” often a social overlay, which is an adaptation to the environment (parents, friends, family, society, work, etc.) where s/he wants to be accepted [33]. People do not openly display what limitations their early development inflicted; however, they often display these limitations indirectly. To distinguish the effects of the early development, you need to know how to see through this overlay, that is, how to interpret what is displayed. Here, a few simplistic examples of how the early and the later impressions may shape the person and the overlay, will be described.

3.1. Two developmental pathways

With this background, we can discuss two very different developmental pathways, that will be used to show the effects of early and later impressions: the described characters have two indexes (X_1 , X_2) that denote quality; where the first index denotes the quality of care during the early development, and the second index denotes the quality of parenting during the later development¹, and the values 1 indicates rich development and 0 indicates poor development.

3.1.1. Person (1,1)

This is an adult person who has got a *rich* early development ($X_1 = 1$) and during childhood and adolescence got a *rich* emotional interaction and life management support from the parents ($X_2 = 1$). This person developed an adaptive internal working model of close persons early in life [34] and continued to rely on adaptive models of the environment also in the further development [34]. These adaptive models were also well connected—by the life management support—to the formal and informal structures in the environment [32, 33].

3.1.2. Person (0,0)

This is an adult person who got a *poor* early development ($X_1 = 0$) and who did not even get any life management support during childhood and adolescence ($X_2 = 0$). This person does not understand much of other persons’ intentions [19] and relies on static schemas in the interaction with others and in the handling of life events [31].

3.1.3. These two are not average persons

Most people are not exactly like these two. In between them, there is a multitude of varieties, of which a few will be discussed further down. In a “western” population, between 30 and 40% are classified as insecurely attached to their caregiver [38], that is, they got a poor early development. There are indications that this fraction is considerably higher among leaders [1, 4, 39].

¹Early development is from birth, with decreasing importance a few years ahead. Later development is from about 2 or 3 years, with increasing importance.

3.2. Two more developmental combinations

Above, two developmental pathways were described. Below, two other varieties of life histories will be described, which can be seen as cross-combinations of the previous ones:

3.2.1. Person (1,0)

This is an adult person who has got a *rich* early development but who did not get any life management support during childhood and adolescence. This person developed early an adaptive internal working model of close persons and continued successfully to rely on adaptive models of the environment; however, these models were not always well connected, by parental influences, to the formal structures in the environment.

3.2.2. Person (0,1)

This is an adult person who got a *poor* early development, but in spite of that got a satisfactory life management support during late childhood and adolescence. This person, who does not have adaptive models of close persons, relies mainly on a repertoire of static schemas in the interaction with others and in the handling of life events [18]. (However, s/he may eventually have developed adaptive models in narrow material areas of life, primarily during adolescence, and may even have acquired high skills in these areas.)

A caregiver who is emotionally unavailable but later gives the child a good life management support (although often with a rather “material”² touch [20] and often focused on giving the child a high, or even inflated, self-esteem [40]) may eventually compensate for some of the early care deficiencies. However, the later this compensation is initiated, the more material and superficial it will be and the less adaptive the child will become [18]. And, importantly, the less stable against distracting threats and fears it will be [41].

Some of those Persons (0,1) will become what historically has been called “the skilled engineer who became a bad manager.” It seems moreover, that today this character is fairly common also in other professions. This issue will be dealt with more later on.

3.3. Four adult categories

For the completeness of this description will also be mentioned that there are four categories of adult attachment as a result of the analysis of the AAI: one is Secure and three are the insecure categories: preoccupied, dismissing, and disorganized [29]. These are described shortly in Appendix C. In addition to the differences because of those categories, the social situation of a parent (marital status, economy, etc.) also plays an important role. Each of these parental attitudes and situations have a different effect on the youngster, which may be manifested in the adult personality [32, 33] and hence also in leadership.

All the different combinations of early care and later life management support that are possible present a wide spectrum of personalities. A description and analysis of these is beyond

²Material: Fun, play, “be happy,” material gifts replace emotions and talk about thoughts [20].

the scope of this chapter. However, for the purpose of identifying detrimental leaders, we can use the following five basic features quite well.

4. Five basic and stable features

In this section five basic features will be described, that can help us to distinguish leadership abilities that were mentioned in the Introduction. Usually it is not possible to predict with certainty who will fit a leadership position (there are too many unknown criteria that should be met) but it is often possible to predict who will probably not be able to manage the leadership in a satisfactory way. Thus, only indications of poor leadership will be focused.

4.1. Trust in others

Trust in others—an important part of the IWM—is shaped early during responsive caregiving. The term trust in others (which originates from Bowlby [34] and regards infants) has in adults a wider meaning than just to trust other persons. In adults, a more suitable term could be to *understand others' intentions* [18, 19]. Having that ability—or feature as it is called here—facilitates trust in others.

4.1.1. Understanding is not necessary for interaction

For our successful interaction with others, a good understanding of their intentions may appear to be a prerequisite. However, it is also possible to interact successfully without really understanding much of others' intentions. As long as the own actions are relevant responses to others' behaviors, the interaction is perceived as successful, whether others' intentions are understood or not. So, normally, relying on an adequate repertoire of schemas may work quite satisfactory. In fact, quite often, those who are perceived as markedly socially competent put an effort on such an attitude because they have a poor early development [18, 42] (they want to “belong”) and because they have a deficient understanding of others' minds [4, 6, 19].

Although social competence is very important in situations when it is required, it should never be a major merit for a leader. When social competence is a major attribute of a person, we can be pretty sure that this person has been carried far in her/his career without much of other essential merits. If so, this is an indication of a deceitful conduct, and we can assume that it is also a cover for a number of severe deficiencies.

4.1.2. Cooperation is not a matter of course

For a person who has a difficulty to understand others' intentions, a fear for negative impact (such as being used, undervalued or criticized) is not well balanced by an insight in others' true—and often positive—intentions. For this person, selfless cooperation for mutual profit is not a matter of course [43]. Often, other persons' kind offers to help are perceived as derogating criticisms [44] and other persons' humble requests for help are perceived as unjustified and stressful demands [16]. When such a person collaborates or helps others, often it is only to get credit for the positive attitude, and it is not an altruistic effort to accomplish a good result for the benefit of all or to unselfishly help others [16, 45].

4.2. Trust in self

Trust in self is initially built up by feedback from the caregiver [18], both positive and negative, both verbal and nonverbal. In this is included the picture of the self, abilities, personal significance and rights that the parents usually imprint [32]. Later on, also perceived success and failure are important factors.

4.2.1. *Dependence on others' opinions*

For a person who has a poor early development, the understanding of self is too minimal to be of much help, and the opinions from other persons will become more important. S/he will spend much efforts to assure that the desires for self-worth and social "belonging" are met [16, 18]. During the years when the youngster is very keen on adjusting to the social environment where s/he wants to be accepted, this person is extra vulnerable since the externally perceived impressions are not well balanced by an internal guide of reference. The result may be an oversensitive person who is "streamlined" to fit whatever is required: performance, looks, language use, and so on and who may become a high performing, insensitive, and intolerant young adult [41].

This kind of (over-)sensitivity (which is a lack of self-worth and resilience) should not be mistaken for the sensitivity that comes with an ability to be receptive/observant and to understand another person. The first is a self-centered attitude and an indication of poor early development, whereas the latter emerges from a genuine interest and an insight in other persons minds and is commonly not a clearly exposed ability.

4.2.2. *High self-esteem or inflated self-esteem?*

A young person who has a poor early development often is anxious to be accepted, or rather, to be appreciated, and is prone to do what is required to reach that goal. The appreciation (n.b., often in a rather narrow area) may give this person a sense of high self-esteem, which, as discussed in more detail by Baumeister et al. [40], should not be mistaken for a promise of a generally high performance. It may in fact be an indication of the opposite.

4.2.3. *Conflict management*

For a person who has a poor early development it is more difficult to manage conflicting situations (regarding moral issues as well as personal conflicts) as external impressions are not well balanced by a firm self-worth [16].

4.3. Flexibility

In adolescents and adults³ *flexibility* can be said to be the cognitive capacity to simultaneously handle and change between alternatives in values, plans and actions. Inherent in this is also the ability to handle uncertainty, as choosing among alternatives implies uncertainty [36].

³In infants, flexibility is a free will to explore the environment [28] and an ability "flexibly to change focus between toys and the parent" [20].

4.3.1. *Flexibility, a demanding task for the brain*

Handling complexity often requires that you have more than one thoughts in mind at the same time. Although the brain is running multiple processes simultaneously all the time (vision, hearing, balance, etc.), having several conscious thoughts in mind requires something extra [26]. Flexibility may be described in terms of how much complexity that conscious brain activities involve, in the following ways:

- When you compare the current state of things with an alternative state of things (to make a decision about, e.g., what is best), you might need to keep more than one thought or focus in mind at the same time.
- When we consider “cause and effect” connections or time dependent processes, we also often must have more than one conscious thought in mind or more than one potential focus. An application of this is a person’s attitude to rules and their intentions: One can regard the intentions behind a rule as a cause, the rule as a means and when the rule is followed as an effect. To the inflexible person, such distant connections may seem too demanding.

A person who got a poor early development typically does not seem to have much of this ability (else than in a narrow area of knowledge). This person also often has rather a shortsighted approach to planning and decisions [16, 44, 46].

4.3.2. *Dependence on schemas*

The inflexible person prefers to do what is customary in the social (or work) environment where s/he wants to be accepted (or where s/he wants to be successful) and avoids actions that may risk desired acceptance or success. As an adult, this attitude may take the form of a dedication to social schemas that warrant a successful result [31, 47].

In an organization, this may show as a person who only does what important persons (or authorities) desire or permit. This often is a person who has a “perfect performance” or who is a “literal follower of the rules” (and who also often avoids uncertainty) and therefore never makes any mistakes. The lack of mistakes is often perceived by other persons as a sign of good judgment and skill, whereas it very well could be regarded as an indication that a good judgment in fact probably is missing.

It is usually important to follow the rules that apply but when following rules replace good judgment, then you might assume that good judgment actually is missing.

4.4. Truthfulness

In attachment research it has been well documented that adult persons with a secure attachment are inclined to tell the truth and that insecurely attached adult persons are prone to allow themselves to be untruthful [20, 29]. (However, children may very well experiment with untruthful statements before the perception of reality has matured).

4.4.1. *The emergence of truthfulness*

A child that is 3 years old does not understand untruthfulness, and an alternative to truth is not comprehensible. In psychology, this is called the false belief principle [32]. This means that untruthfulness does not exist to the child during the very important time when the system is developed that will guide the person during the rest of life. The child who gets a rich early development will accordingly get a firm belief that truth is fundamental. The child who got a poor early development and was not able to build a conception of the world and self until after 4 years of age, was aware of untruthfulness by then. This child built its conception of the world with both truth and fiction/lies as feasible options that can be used as they were needed.

Although a truthful attitude and behavior may be strongly influenced by parents and other factors (school, church, neighbors, friends, and society) during childhood and adolescence, there seems to emerge a particular intrinsic truthfulness from a rich early development. An important difference is that the later learned truthfulness may be easily suppressed by distress or when other things get a higher priority.

Untruthfulness may be manifest in a few slightly different ways:

- Obvious lying or bluffing.
- Having a hidden agenda, that is, intending to do something else than what you say.
- Idealization, that is, describing something (primarily your own state) as better than it is.
- Exposing prestigious objects or other circumstances (title, relations, lifestyle, etc.) depicting that you have “a better value” than people who do not have or do the same.

Concerning persons who have an inflated self-concept, if they really believe in their self-concept, maybe they are not really lying or bluffing but instead they display a deficient connection to reality – which is not any better in a leader position.

4.4.2. *Habitual untruthfulness*

Being habitually untruthful means that the reality is not more important to the person than the fiction that s/he presents, or the consequences of that fiction. Everybody is not habitually untruthful [15], and it is also a matter of degree; the more untruthful s/he is—the less general leadership abilities s/he can be assumed to have.

To most people, obvious lying is not acceptable. However, there are forms of untruthfulness that, among many people, are not only accepted but even seen as positive, as a merit. A very common example of this is when somebody pretends to be “bigger” or better in some respect, displayed in body language and appearance, in possessing prestigious items, or engagement in prestigious contexts. Strictly, these actions are meant to betray the observer (although many people do not even perceive it as betrayal), and they are accordingly untruthful acts.

4.4.3. *Untruthfulness, the reliability aspect*

When a person is habitually untruthful, s/he puts the priority of the own advantages over the priority of others (the family, company and society), particularly so, if the untruthfulness

regards circumstances concerning his/her own person. Hence, if your subordinate, wife/husband or friend is untruthful to others, s/he also is prone to be untruthful to you.

4.5. Intrinsic sense of responsibility

Our sense of responsibility has two components: one intrinsic and one extrinsic. The *intrinsic sense of responsibility* is believed to emerge from the same location in brain as some of the IWM do [48]. How strong it is can be assumed to depend on how rich the early development was and hence how strong and dominant the early created control system is. The extrinsic responsibility emerges from the parts in our brain that are dedicated to reading, writing, counting and other abilities controlled by rules [48] and can be assumed to have been shaped at later stages of development than the intrinsic sense of responsibility. The balance between intrinsic and extrinsic depends on the balance of influences during childhood and adolescence.

4.5.1. Requirements for responsibility

Winter and Barenbaum [49] published a scoring system for responsibility, built on five descriptors: # 1 Moral standard. # 2 Obligation. # 3 Concern for others. # 4 Concern about consequences. # 5 Self-judgment.

Hence, if these criteria are not met—that is, if the scores are low—it may be reasonable to assume that the intrinsic sense of responsibility of the individual is impaired. In persons who have a poor early development, two of these criteria, # 3 Concern for others and # 5 Self-judgment commonly are not met [20]. Therefore, persons who have a poor early development can generally be assumed to have an impaired sense of responsibility.

4.6. The basic features indicate leadership abilities

The general leadership abilities may be indicated by the basic features, as follows: (Note however, that also the influences from relevant life management support on the development of abilities are important [17, 32, 33].) The ability to spontaneously cooperate with and understand other persons is related to the feature trust in others (i.e., to understand others' intentions) [18, 19]. The ability to have integrity in conflicts is related to the feature trust in self [16]. The ability to handle complexity and uncertainty is related to the feature flexibility [15, 16]. The abilities to have a good moral judgment [17] and to distinguish between appearance and reality [20] are related to a combination of all the five basic features.

5. The application of the concept

5.1. A few comments about the described concept

The first sections of this chapter described how and why important human stable features are established so early in the individual development. Then, five basic features that are important were presented (this is state of the art knowledge) and how this knowledge can be used to interpret some behaviors that can be observed. In the following section a few general examples will be mentioned, of how these features may combine in a personal developmental context (these are inferences from state of the art) and then these inferences will be put in

more practical leadership contexts. To emphasize that a reference only regards the state of the art that the inferences are based on, and that the reference does not state a verified connection between early experiences and leadership, that reference is enclosed in an extra parentheses.

The presented concept is, to my knowledge, not published before, and there are few or no studies that have studied the following inferred connections. Consequently, there is little or no strictly scientific evidence for these examples. Even so, they may be better alternatives than some of the rather unfounded concepts that are used today. This section can also be seen as a collection of suggestions for future research.

There are a few researchers who have touched upon an analysis of the background of inferior leadership; examples are Adorno et al. [15], Argyris et al. [50], Fors Brandebo et al. [51], Friedman et al. [44], Heckman [52], McCrae et al. [13] and Rubenowitz [53]. Of these, Argyris et al. have published the most complete analysis when they characterized and compared *Model I vs. Model II Theory-in-use* and *Single vs. Double Loop Learning*.

5.1.1. My best tips should not be exposed in public

There are a number of typical behaviors and attitudes that signify particular unproductive or detrimental mental states. It would certainly have been nice to list them here as a help for the reader. However, doing so would impede the value of them as predictors, as those who are interested in success without effort would misuse this knowledge. The following are examples of general behaviors that you may see.

5.2. A few general characteristics

5.2.1. The person with a rich early development

The person with a rich early development does normally not present much problems due to dishonesty, self-centered decisions or lack of responsibility [16, 50]. The problems they bring as leaders are often due to deficiencies that do not regard stable features, which means that they usually can be improved. Common to these persons are a low need to display prestige (so they often have a “low profile” and are not very “visible”) [15, 40, 53], they do not strive for power for power’s own sake (so they may lack an impressing career record) [15, 53], they may have a “democratic” stance in their leadership [51] (which in authoritarian cultures often is seen as a weak leadership) [50], they dare to do things their own way (they are often not streamlined) [15, 51], they may venture into uncertain areas or assume difficult undertakings (with a risk for substandard results, as perceived by outsiders) [15], and they do not skillfully disguise their shortcomings or aggressively deny their faults [15, 47, 50]. To many people, they do not seem as suitable for a leadership position—which may be a great mistake as it is among those that you will find the high potentials [15, 50]. Hence, this is a very diverse group that cannot be distinguished by a simple template judgment [20].

Person (1,1) (rich early development and rich life management support) may seem as the perfect choice for a leader position but that depends on what flavor of life management support that has been supplied. Although they often may have a high basic potential for successful leadership, they may have other priorities in life. As leaders, they are normally not connected to problems and they are accordingly not within the focus of this chapter.

Unfortunately, when you think that you are talking to a very nice high-performing Person (1,1), there is a substantial risk that you are not doing that at all. It may very well be just another skilled pretend-to-be-the-perfect-leader that you are talking to, most likely it is a Person (0,1). (If so, be careful, because this is most likely a deceptive person, and the social competence that just fooled you is probably about the best genuine ability that s/he has—else than perhaps very good grades from school.) [4, 16].

Person (1,0) (rich early development and poor life management support) is not very common in a leadership context [30], probably, a creative person, a problem solver. If s/he is a leader, it often is to lead a (small) enterprise in order to sell a production based on her/his creativity.

5.2.2. The person with a poor early development

At this level of description, the persons with a poor early development could be anyone of the three insecure AAI categories: preoccupied, dismissing and disorganized. This means that the poor early caregiving could have been inconsistent, inattentive, rejecting or harmful [20, 35]. This early caregiving had specific influences on their attitudes and further development, and thus, how poor and troubled their infancy was normally influenced how they are as leaders [16, 32]. However, the specific effects of these different kinds of poor caregiving experiences are beyond the scope of this chapter. Common to these persons are that their general leadership abilities are poor.

Persons who have a poor early development often are prone to strive for material success. High power is a common indication of success. These power hungry persons are more eager to strive for power than what their abilities support: often, they overestimate their own abilities [15, 16] and they often are shortsighted [16, 44, 46]. In particular, they are more power hungry than the persons who have a rich early development and who (if they got an adequate life management support as youngsters) most likely would do a better job as leaders [41].

Person (0,1) (poor early development and rich life management support). Most moderately detrimental leaders will probably belong to this group. With well-trained attitudes and the right material backgrounds (school, career history and references), these detrimental leaders manage to reach positions where they can cultivate the right connections and acquire strategic knowledge. This may eventually make them valuable or even “irreplaceable” on high organizational positions, which is their ultimate goal. They get the power to do as they please, but they often lack the basic features to do it well.

Person (0,0) (poor early development and poor life management support). A poor life management support can mean no support at all (and if so, these persons are not common in an organized leadership context) or it can be inconsistent or even faulty (antisocial). A faulty life management support may include how to avoid legal limitations, to prioritize selfish goals, and to betray those who can be betrayed. (Such negative impact could very well be denoted as Person (0,-1) in this classification.) Most of these persons do not become leaders but those who do are highly detrimental, particularly so if their seductive skills get them far. However, a discussion of styles of different detrimental leadership is beyond the scope of this chapter.

5.3. A few practical examples: the high performer

Based on the descriptions of the different pathways in development, in previous sections, here will be illustrated how deficiencies in the stable features can be distinguished in the decisions, actions and behaviors of leaders and how knowledge about the stable features can be used to avoid underperforming leaders.

5.3.1. *The high performing and intolerant person*

A few examples will be mentioned here, of the particular set of attitudes that you may see from a high performing leader who has got a poor early development. This person often has, during childhood and adolescence, been valued for a high performance in often narrow areas (school, sports, acting, music, etc.) and therefore often has a high self-esteem [40, 47].

- This person has “always” been praised for a good performance and has high thoughts about the own competence or skills, maybe also (eventually unwarranted!) in areas other than the special skills (inferred from [16, 40, 47, 50, 54]).
- An important part of her/his performance is to optimize the positive presentation of her/himself, so s/he only says and does things that support the positive self-image (inferred from [16, 54]).
- S/he does not do things that s/he is not trained to do. As a consequence, s/he never does anything less than good, and s/he has a difficulty to take on new leadership tasks (inferred from [6, 47, 54]).
- When forced to plan for the future s/he copies the historic course (or other persons’ plans) and has a difficulty to foresee and handle future changes out of her/his own insights (inferred from [50]).
- S/he has deficient understanding of other persons’ intentions and perceives kind remarks from others as very negative and scathing criticism (inferred from [16]).
- S/he can be very rude when criticizing a person, even regarding a minor fault, in part because s/he has a poor knowledge about how s/he is perceived (inferred from [16, 50, 54]).

This person may be what, half a century ago, often was called “the skilled engineer who became a bad manager.” Today though, this character maybe is equally common in other professions. Often s/he is found on a middle management position.

5.4. A few practical examples: general deficiencies

Here, a few examples will be mentioned of leaders, who are not the typical high performers, and who may show a number of other, more general, indications of poor leadership.

5.4.1. *The mismanaging executive*

An executive who has a poor early development may be inclined to mismanage her/his organization in several ways [16]. Here are some very general examples:

- The own prestige (or maybe only the need to feel good) may be more important than the future success of the organization.
- S/he often has a limited capacity to understand and manage complex things, like possible cause & effect relations or the effects of several simultaneously influencing factors.
- S/he is likely to overestimate her/his knowledge regarding areas that are important, simply because that knowledge gives prestige (the benefits of actual knowledge is underestimated and may be foreseen).
- S/he will most likely avoid to engage competent persons in her/his close vicinity, people that may object to or criticize her/his decisions.

The items in this list may also be indications of other deficiencies, the validity of which should be checked by other means.

5.4.2. The energetic change initiator

A leader with a poor early development may often seem to have a more energetic attitude [41], but this should not be mistaken for well planned activities with functional goals. Often the goal is to fulfill strivings for own prestige, not to create a well-functioning result. Commonly this person does not have the required capacity to make long term plans including analyses of prerequisites and consequences. This person may successfully perform a previously planned schedule (maybe planned by somebody else), even a complicated one, but has a difficulty to handle appearing deviations well [50]. And when something goes wrong, somebody else will have to pay the extra cost [54].

5.4.3. Inflexible persons avoid complex issues

Persons with a rich early development often have the ability to handle complex concepts or problems, and persons with a poor early development often do not have that ability [31]. Sometimes, you may hear an inflexible person say (often with an intolerant attitude) that the flexible person talks about too complex things (and the flexible person may say that the inflexible person does not understand complexity). Such disagreements may in fact be quite revealing as the inflexible person, with this attitude, discloses indications of several other probable deficiencies.

5.5. Avoiding detrimental leadership

5.5.1. Counterproductive reactions when leaders fail

A common reaction when leaders have failed, particularly when lack of moral judgment is perceived as a major reason, is to increase the demands of orderliness and perfect performance when new leaders are recruited. This is a counterproductive strategy as those who have an impressive history of doing everything right and never do anything wrong often are inflexible persons (who accordingly lack an intrinsic sense of responsibility), and those who are most successful in displaying the desired social appearance often are the most deceptive ones. Unfortunately, this mistake seems to be prominent in public authorities where law and order often is the essence of the organization.

5.5.2. *The attitude to competition*

People may have different attitudes to competition:

- One person tries to win a competition by performing as well as possible, by having better skills than the opponent (inferred from [6]). (This may be a person with a rich early development).
- Another person tries to win by making the competition more difficult for the opponent, by spoiling or even sabotaging the competition for the opponent [50]. (Presumably a person with a poor early development).

In most sports and games some rough tactics are allowed and even encouraged but when it comes to competition about leadership positions the organization is not assisted by letting rough competition tactics influence the choice of leaders. Such a behavior is an indication that the person has most of the disadvantages that often come with a poor early development.

5.5.3. *So, how do you avoid the detrimental leaders?*

1. Do not let them into your system. Do not let the wrong people advance in your organization so that they can get the strategic knowledge and the right connections. Do not let them acquire the necessary power.
2. Do not employ somebody from outside of the organization, on a high level, based on an assuring success history. Being successful does not mean that a leader knows how to foresee and handle the future risks and pitfalls. Besides, what influences did this leader actually have on the referred successful history?
3. When potentially detrimental leaders accidentally have got into your system, be sure to identify them early and do something to inhibit their negative effects.

5.5.4. *How do you do to make a difference between good and bad?*

1. Stable positive features are seldom displayed directly. However, deficiencies in stable features often are indirectly displayed quite openly.
2. The (positive) features that are displayed in an apparent way are commonly changeable features that have been learned only to attain a desired effect. Quite often, they indicate the opposite of what they seem to declare.
3. Be tolerant to acceptable faults (i.e., when it is in changeable features) and do not tolerate unacceptable deficiencies in stable features. (Far too often, this is done the opposite way).

And remember, do not let only a few indications control your opinion about a person, neither positive nor negative ones.

5.6. **Future research**

In the last section of this chapter, there are several assumed connections that should be verified by scientific studies. When performing such studies, two warnings should be raised:

- (1) self-evaluating questionnaires do not readily assess indications of the early development.
- (2) adults with a dismissing attachment are prone to idealize their life and describe it in a more positive way than justified [16].

One particularly interesting research question may be: Does the concept that has been presented here describe the emergence of authentic leadership [21]?

In leadership research generally a variable related to the early development would most likely improve the evaluation of data and enhance the research. The reason is that data sometimes can show different patterns for persons with different early developments. Hence, one suggestion would be to include an attachment-related variable whenever personality is an important part of the study.

5.6.1. For recruitment, attachment assessment is not recommended

For purposes of research, an adult attachment assessment may be very useful, but in recruitment cases, an attachment assessment would demand far too much specific knowledge and experience. Moreover, the possible connections are weak, and the cost for a thorough investigation is high.

6. Conclusions

6.1. The utility of the concept

This concept aims to meet the issues addressed in the Introduction.

- A. The concept describes basic and controlling features that are fairly stable during life, and thus that can be relied upon as important indicators of a person's possibilities and deficiencies.
- B. The concept describes how experiences may be accumulated during life, to make different (complex but discernible) adult personalities, which may serve to provide a description of what requirements that should be met by a person on a certain work position.
- C. The concept provides a tool to understand what factors that probably control a person, better than today, and to better predict future likely developments and actions of this person.

6.2. The early development does not determine the leadership

The possible connections between leadership and features related to the early development, which have been a foundation for this review, should not be understood as a belief that leadership is determined by the very early development. There are many other experiences during a young person's life that also are important. However, what can be drawn from attachment research is that the developmental pathway that a young person threads, and hence what sort of experiences that make the leader, is strongly influenced by the early development prerequisites [18].

7. Final words

Some of the distinctions between people that were made in this chapter, may be mistakenly understood as though people should be valued because of their abilities. Nothing could be more wrong: a musical person may be highly valued in the realm of music and a nonmusical person may perhaps not be contracted to sing in a choir but they are equally valued as human beings. A leader who is dishonest and egocentric should not be a leader but should be respected as a human being.

Dear reader, if you would find some of the descriptions of human behavior here as unfamiliar and if you feel that you do not recognize them, please be patient. Depending on the frequency of interactions with others and the type and spectrum of interactions, it may take quite some time to recognize behaviors and attitudes that previously were unknown to you. It may very well take a few years to develop a good ability to do this. And besides, this description is far from complete, there is more to be said about each feature and there are a few more basic features to describe.

I wish you good luck on your journey among new and exciting experiences.

Conflict of interest

I have no conflicts of interest to report.

Thanks

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Appendices

Appendix A

Caregivers may act in different ways to their children. Here, two attitudes are referred [28]: (A poor development is represented by inattentive caregiving here because it is least complex).

Responsive caregiving: Caregiver responds very soon when infant announces need for help, cuddles, waits for turn-taking (see Appendix D) and gives firm but kind feedback when needed. During childhood: talks about emotions and thoughts with child.

Inattentive caregiving: Caregiver responds only when discomfited by infant's crying, does not cuddle, is impatient (see Appendix D) and does not give (kind) feedback. During childhood: Allows only material contact with child, does not talk about emotions or thoughts.

Appendix B

In this part of the brain (primarily anterior CC and anterior IC), the right side develops first and the left side later, so if the early development is poor, then the right side becomes poor. The impressions that are stored when the left side has started to develop will be stored more as static “facts” (similar to other abilities controlled by rules, like language, reading, writing and counting) in contrast to the dynamic right side “flowchart maps.”

Appendix C

In the analysis of the AAI, four categories of adult attachment are used. Included here are some typical characteristics of these categories. They are the following [20, 29]: (A parent often replicates the own infant attachment experiences in the care for her/his children).

- *Secure parent*: A responsive caregiver. Exhibits flexibility, trusts others, has high coherence of mind⁴, emphasizes truthfulness and has good appearance-reality distinction.
- *Preoccupied parent*: A caregiver who interacts inconsistently with their infant. Exhibits entangled picture of reality, has little respect for other persons, “put yourself in focus.”
- *Dismissing parent*: A caregiver who is inattentive or even rejecting. Exhibits shallowness, shows little interest in other persons, emphasizes normalcy and avoids unfavorable details.
- *Disorganized parent*: A harmful caregiver. Exhibits neglect, abuse, and mistreatment, distrusts others and is deceptive.

Each of these parental attitudes has a different effect on the youngster [32, 33] which may be manifested in the adult personality and hence also in leadership.

Appendix D

The infant brain does not learn very much just because the caregiver is present, and it is only when (what I call) a *learning mode* is turned on that it learns much. This learning mode is turned on by a substance called oxytocin [55] (supported by the effects of serotonin and dopamine) which is secreted into the brain [56] when a trusted person who provides comfort is interacting in a loving and playful manner with the infant. If the caregiver does not interact in such a manner that the learning mode is turned on, little learning is performed.

Author details

Bertil Engelbert

Address all correspondence to: bertil@engelbert.se

University of Gothenburg, Gothenburg, Sweden

⁴Coherence of mind = an ability to distinguish between appearance and reality, to handle complexity and uncertainty, and to have an intrinsic sense of good moral judgment [20].

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