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Editorial

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As the New Year arrives, we have a great collection of articles from around the world – from authors in Argentina, Australia, Italy and Taiwan – and three of these articles have been translated from Chinese, Italian and Spanish.

IJTARP continues to bring together the worldwide TA community, and to make the contributions available open access so that everyone can read them regardless of income.

With the support of volunteers, we also continue to make the Abstracts available in a range of languages at <https://taresearch.org/ij tarp-abstract-translations/> - 13 languages so far and we welcome more volunteers.

In terms of the content in this issue, all the articles are extending existing TA theories. Two do this through literature reviews alongside the presentation of

intriguing new ideas. Two others report on research studies and their contribution to how we apply TA concepts, including one that presents us with a game questionnaire..

In terms of ego states, Jorge Close invites us to consider whether Adapted Child should be regarded as part of Parent ego state; Tony White concentrates on working with the Child ego state; Cesare Fregola considers the impact of the Cultural Parent.

Coincidentally, the material from Argentina invites us to think about decontamination, followed by the material from Australia prompting us to consider the various ways that deconfusion might take place.

And from Taiwan, Iming Huang shows us the process of developing a questionnaire about psychological game playing.



Structural Transactional Analysis: Ego Selves and Ego States - Cause-Effect and Interventions

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Editor's Note: this article appeared first in Portuguese in Revista Brasileira de Análise Transacional (REBAT) Ano XXX 2021 and is translated and re-published here with kind permission from that journal. The original version can be seen at <https://unat.org.br/portal/rebat-2021.php>

"How are we to hope that, one day, we might free ourselves of the animal we carry within us, if we are never informed of how the wonderful mechanism called the nervous system works within us?"

Attributed to Henri Laborit (1914-1995).

Abstract

This article identifies the physiological, neurological, and psychological determinants that arise from constraints imposed by both genetic and environmental factors, originating human behaviours. The determinants, called Ego Selves, that organise the phenomena that Eric Berne classified, structured, conceptualised, and defined to mould transactional analysis and design instruments to assist professionals and patients to adjust behaviours, are analysed. A different form of presenting the adapted Child, differentiating it from Berne's model where the adapted Child is shown as a part of the natural Child, is presented. Parent-Adapted Child, and the Adult ego states, adjusting their manifestation and organization to the physiological development of their corresponding ego self, are identified, proposing that the Adapted Child is a part of the Parent ego state. Contamination is reviewed and adjusted for consistency between cause and effect, identifying that the contaminated ego state is the Parent ego state, creating a delusion based on injunctions that generate an illusion in the adapted Child portion of it which in turn causes the natural child's emotional reaction, considerably limiting the Adult ego state's capabilities to intervene. Script analysis is reviewed and organised indicating that the script is a life plan initiated at conception and ending at death, and that it is

indispensable for survival, having adequate and inadequate segments that may limit lifespan and quality of life. Occurrences, neurophysiological factors, and memories involved in their development and implementation are also identified. Suggestions and examples for the integrated development of intervention strategies and tactics to adjust behaviours and fulfil contracts are presented in the corresponding section.

Keywords

structural analysis; ego states; contamination, script; self; needs; homeostasis; behaviour; development stages; phylogenetic memories, ontogenetic memories

Introduction

Berne (1961) defined ego states as manifestations of three different psychic organs - the archeopsyché, the exteropsyché, and the neopsyché - alluding to but not identifying areas of the central nervous system. He also stated, "We shall now speak of three *instances*: determinants, organizers, and phenomena" (p. 264) (*italics in original*), going on to define determinants as "factors which determine the quality of the organization and the phenomena, that is, they establish their programming" (p. 265). This article will review the determinants that originate human behaviour and explore how these determinants, called Ego Selves, organise the phenomena that Berne classified, structured, and conceptualised to mould transactional analysis.

I will comment on:

- the Free Child, Parent-Adapted Child, and the Adult ego states relationship;
- contamination for consistency between cause and effect;
- script development and organisation to reflect neurophysiological factors involved in their development and functionality.

I will include suggestions for the development of interactive intervention strategies.

Human beings are a development of the animal kingdom, and, considering the neurophysiological aspects, operate as Selves. The term Self is used to signify “the union of elements (such as body, emotions, thoughts, and sensations) that constitute the individuality and identity of a person” (Merriam-Webster 2019). Mitchell (2005 - referring to Jung) maintained that “The self is not only the center, but also the whole circumference which embraces both conscious and unconscious; it is the center of this totality, just as the ego is the center of consciousness” (p. 4).

Considering this definition and concept and relating these with the developmental levels of the central neurological system, we can identify three interdependent and integrated Selves.

Ego states were described by Eric Berne (1972), “phenomenologically as a coherent system of feelings related to a given subject, and operationally as a set of coherent behavior patterns; or pragmatically as a system of feelings which motivates a related set of behavior patterns” (p.11). These behaviours were classified by Berne as Child ego state (Child), behaviours, thoughts and feelings related from childhood; Parent ego state (Parent) behaviours, thoughts and feelings copied from parents or parent figures and the Adult ego state (Adult) behaviours, thoughts and feelings which are direct responses to the here-and-now. Therefore, we can conclude that the three ego states are not entities, nobody is in an ego state, rather they are expressing behaviour patterns classified as representing Child, Parent and Adult ego states, and that these are in effect sequentially developed.

The three different levels or Selves are the Physiological Hereditary Self (Natural Self),

Psychosocial Self (Social Self) and, the Conscious Self (Conscious Self). This article will explore how the different Selves originate behaviours that we can classify as ego states, their neurophysiological constitution and development, and the need to understand these to design adequate strategies and tactics to meet client contracts.

Sequentially, in terms of human development, the first Self to be developed is the Natural Self which initiates its development process at conception and continues as the autonomous nervous system completes its development (1½ years of age) (Stiles and Jernigan, 2010). Using the information stored in its genetic memory (Cardinali 2001) from millions of years of genetic development and those more recent experiences of ancestors (Kandal, Schwartz and Jessel 1991), this Self's principal objective is survival, as a being and species.

The second Self to be formed is the Social Self. This Self initiates its development as the cerebral cortex evolves and continues its development in different stages, adapting to significant changes in the environment (see Figure 1). Based on the phylogenetic hereditary memory relating survival to social integration and acceptance, this Self is developed to help us survive in the environment in which we live. Its development is initiated after birth and formed by verbal and nonverbal instructions received from the principal caretakers, who at this point have the survival of the new being in their hands.

The infant, aware of its dependency, considers that which is communicated to it, through actions, words, tutorials and modelling, to be essential to its personal and social survival. These learnings, stored in the ontogenetic memory, also register the emotional impact that this learning process has had (Stiles and Jernigan 2010; Li and Fan 2019; Thompson and Kim 1996).

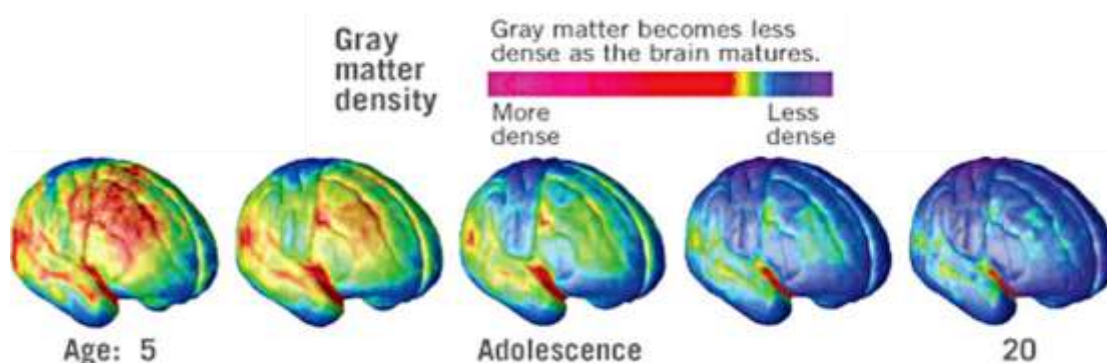


Figure 1: Stages of Development of the Social Self (based on material from Gogtay, N., Giedd, J. N., Lusk, L., Hayashi, K.M., Greenstein, D., Vaituzis, A.C., Nugent III, T.F., Herman, D.H., Clasen, L.S., Toga, A.W., Rapoport, J.L. and Thompson, T. M. 2004).

The third Self, the Conscious Self, is that part of the human being that operates in the here-and-now, and is conscious of its Self, its surroundings and environment, its behaviour, the adequacy of the behaviour and the analytical processing of perceived stimuli, the interpretation of the stimulus and the adoption of adequate behaviour to meet needs. Its objective is to transcend animalistic beginnings, giving purpose and significance to its existence. Present at conception and as the Social Self develops, it will be limited in its expression as the neurophysiological organs it requires to manifest are still in development (Superior Frontal Lobe). This Self starts interacting, reviewing, and evaluating the adequacy of the incorporated instructions at adolescence, when the frontal lobe starts to intensify its development, reaching full expression capabilities at early adulthood when fully developed (Tanaka, Matsui, Uematsu, Noguchi and Miyawaki 2012; Kandal et al 1991; Li and Fan 2019). This Self can assume the executive function of the personality.

Behaviour

An initial word about behaviour - all living things endeavour to maintain homeostasis; the lack of homeostasis generates needs (Cooper, 2006). The needs generated by the lack of homeostasis require their satisfaction to regain the equilibrium required for healthy well-being/survival. Whatever behaviour we initiate, be it drinking, playing, transacting or making strategic alliances, it is because we are subjectively feeling a certain need.

In each context or situation, a stimulus will be perceived by the senses and proprioceptive receptors that will be transmitted by the peripheral nervous system through the autonomic nervous system to the rest of the central nervous system (Waxenbaum and Varacallo, 2019). This implies that primitive hereditary behaviour will be initiated before automatic or voluntary behaviour. The resulting precept (general rule) will be analysed by the genetic/kinetic hereditary memory, initiating an interaction with the endocrine system resulting in the production of chemical substances that will create physical behavioural responses. The precept, continuing its advance through the central nervous system, may also initiate protaesthesia or conscious behaviour (Hall, 1998). In all instances, the resulting behaviour will be directed to fulfilling a latent need.

Adequate behaviour is that which satisfies a need directly; inadequate behaviour is that which does not satisfy the need, even if it pacifies it by producing a pleasurable response.

The Natural Self will receive first the stimulus (Cardinali, 2001) and will interpret it considering the information stored in the genetic memory, hereditary script, "life plan control" (Berne, 1961, p. 87) and will

emit neurotransmitters to promote the physical reactions required to meet the latent need given the interpreted emotional scenario (Thompson and Kim, 1996). The Free Child ego state will then manifest behaviours that can be classified as emotions (fear, anger, joy, sadness, or libido), and adopt behaviours to meet the latent need, consistent with the perceived stimulus and resulting emotion, the internal physiological reactions (Li and Fan 2019).

The Social Self will receive the stimulus and process it considering the information stored in the ontogenetic intrinsic memory. This interpretation may stimulate a sensory-based experience resulting in primitive or archaic behaviour if the perceived stimulus triggers past experiences that conform to the intimate script "adaptations of infantile reactions and experience" (Berne, 1961, p. 117). The individual will utilise the stored information/behaviour and emotional content, re-living the past situation in the here-and-now. The Parent and Adapted Child ego states will manifest themselves as they did in the past even though the present situation is different.

As the Conscious Self continues its development stemming from the prosencephalon (forebrain) and the frontal lobe acquires functional capabilities, it can perceive and analyse the adequacy of the behaviours (Thompson and Kim, 1996; Kandal et al 1991; Fonagy 1996), both internal and external, and conclude as to their adequacy in the satisfaction of the latent need. If the conclusion is that the behaviour is inadequate it can promote the adoption of adequate behaviour.

Composition of the Selves

Each Self has its layer of physiological components, needs, and behaviours to meet them. Operating through different parts of the central neurological system, they are independent of one another, operating as interdependent parts of an indivisible system.

The Natural Self

The Natural Self is that part of the human being that is responsible for physiological survival and registers thousands of millions of years of learning derived through the accumulation of experiences from the different forms of life that preceded it. It is that part of the human being that operates automatically, creating, recreating, and operating cells, organs, and organ systems in such a way as to permit survival. It is that part of the central nervous system that will initiate behaviours, interacting with all the components of the central nervous system, producing psychosomatic effects, affecting both physiological and psychological homeostasis (Howard and Lewis, 1972).

The behaviours to meet latent needs are based on the interpretation of perceived stimuli, generate organic reactions, called emotions, and transform electric

energy into chemical energy, and chemical energy into mechanical energy (Cardinali, 2001; Kandal et al 1991). Using the central nervous system's most archaic parts, it will be fully functional after the primitive archaic autonomic brain completes its development, initiated three weeks after conception and completed around 18 months after birth (Stiles and Jernigan, 2010). This area does not differentiate between imagination/fantasy and reality; for it everything is as if it were real - what psychological theorist Fonagy (2001) calls 'psychic equivalence'.

The 10 organ systems created and operated by it, that work with one another interdependently, are the integumentary system, skeletal system, muscular system, lymphatic (immune) system, respiratory system, digestive system, complete nervous system, endocrine system, cardiovascular system, and the reproductive system (see Figure 2).

The needs to be met to maintain the necessary homeostasis are in order of importance for survival, oxygen, thermal regulation, hydration, sleep, nutrition, excretion, sensory stimulation, physical activity, and emotional expression. The organic reactions that we call emotion are provoked by the autonomic nervous system, that interprets the stimulus and interacts with the endocrine system to produce neurotransmitters that induce the different organic systems to produce behaviours that we classify as fear (flight), anger (fight), sadness, joy, and libido. These are natural emotions; other emotions can be referenced but they are not a product of the autonomic nervous system.

The information required to complete its purpose is stored in the phylogenetic memory, genetic memory, and constitutes a nuclear hereditary script and that answers the question: 'What am I?' and 'What needs to happen to survive?' (see Figure 3).

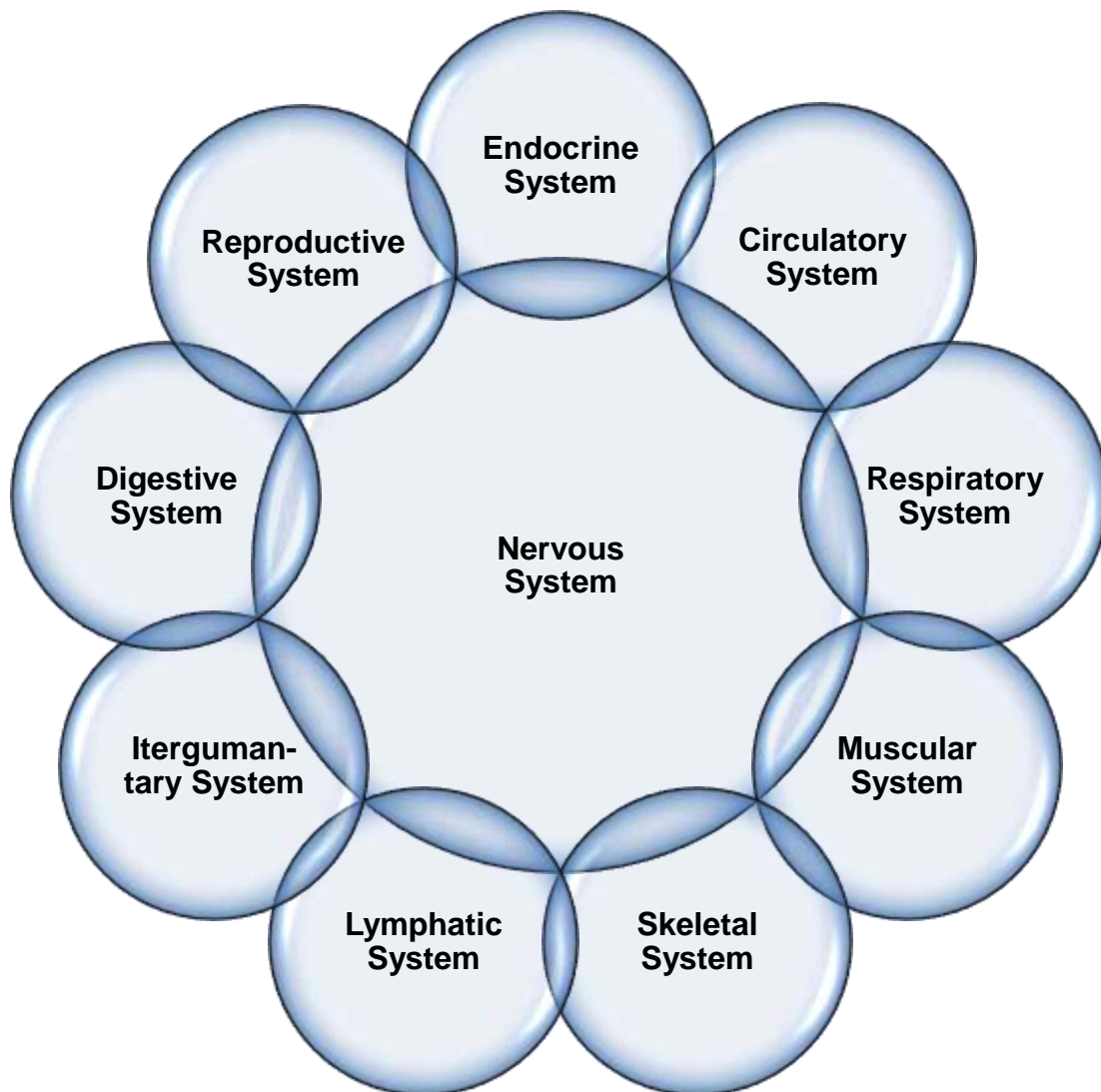


Figure 2: The Organ Systems

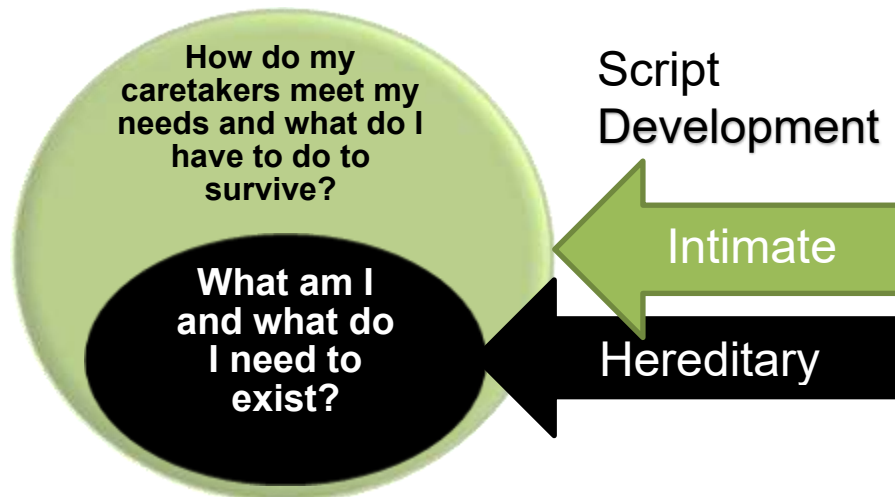


Figure 3: Development of the Intimate and Hereditary Scripts

The Social Self

The Social Self teaches us how to meet our needs in the environment we are inhabiting. Our Natural Self identifies the needs to be met; however it needs to learn how to meet these in the inhabited environment. It is the caregivers that indicate how to do so when attending to the child’s needs (see Figure 4).

As individuals choosing behaviours, we are oriented toward seeking our well-being. Hence, the tendency to approach new behaviour in the hope of being rewarded by satisfying needs. However, in some instances our experience may have taught us that such pleasure-seeking behaviour might be punished. Our behavioural options include fight or flight, or inhibition of our behaviour and adoption of those imposed, and/or to go unnoticed, avoiding confront-

ation. Adoption of imposed behaviours to eliminate dangers that are perceived to threaten integrity and well-being (Hall, 1998) are not without psychological effects, notwithstanding that this cost is minimised by the understanding that the affirmative action would bring about greater dangers.

The experienced instructions required to meet needs and protect existence, without suffering confrontation, are stored in the intrinsic (emotional) ontogenetic memory, that originates in the amygdala and involves the cerebellum and neocortex subsystems (Stiles and Jernigan, 2010). Learned instructions are stored in the explicit memory, that originates in the hippocampus and involves the medial temporal lobe subsystem (Li and Fan 2019), that can be accessed cognitively.

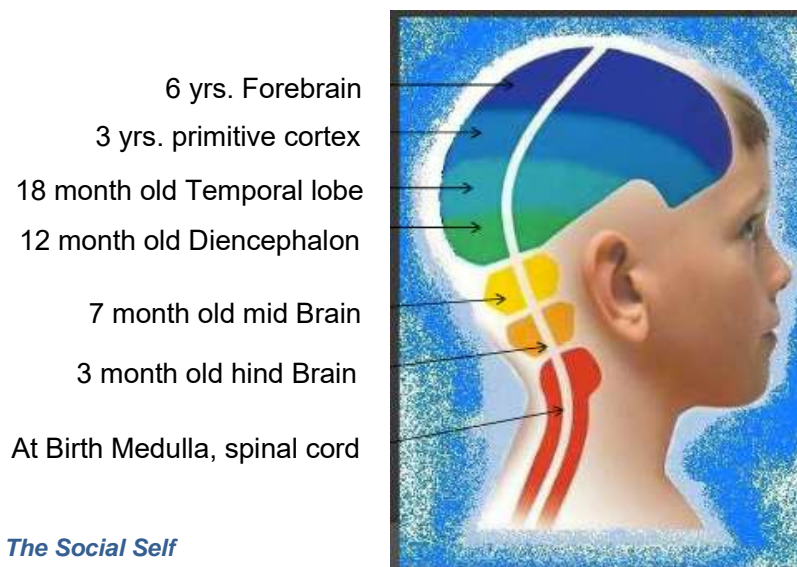


Figure 4: The Social Self

This indicates that, in all circumstances, the intrinsic memory is activated before the extrinsic memory. The extrinsic memory initiates its operations around 18 months after birth, as the brain develops, and both continue to operate through the lifetime. The behaviours and implicit values received and adopted to satisfy needs following the perception of the instructions received from and reinforced by principal caregivers, constitute the basis for conditioned behaviour (Waxenbaum and Varacallo, 2019) and the uncensored value system that may govern our behaviour (Tanaka et al 2012). A sensory pathway that runs through the central nucleus of the amygdala constitutes the basis for automatic reactions using the somatic sensory cortex of the parietal lobe in connection, basically, with the occipital lobe and the temporal lobe (Kandal et al 1991; Dias and Ressler, 2013; Thompson and Kim, 1996). This behaviour is based on past experiences and is independent of adequacy to the here-and-now.

The original hereditary script will now be enhanced with the information acquired that answers the questions 'Who do I have to be?' and 'How do I have to behave to be accepted and survive in this environment?' This information is stored in the intrinsic ontogenetic memory and will constitute the intimate script. To these two script modules, an additional mod-

ule will be added consisting of those instructions stored in the extrinsic ontogenetic memory (see Figure 5). The needs to be met at this point in development are that of social integration (hierarchy and function), acceptance, protection, understanding and participation.

The emotion that this Self learns to express may originate from natural emotions and/or those learned to disguise them. Examples of learned emotions in our societies are resentment, anger, anxiety, confusion, jealousy, phobic fears, envy, anguish, irony, unloved, inadequate, shame, anxiety, guilt, depression.

Our behaviours, up to this point, are thus the product of these two influences: the way that evolution has structured our brains (the physiological Self) and the way that our environment individualises this structure throughout our lifetimes (the Social Self) (Cardinali, 2001).

The Conscious Self

The Conscious Self is that part of our being that operates in the here-and-now and can be used as our brain's executive. This Self looks to answer the question of 'Who Am I?' and 'What Can I Become?'

This Self refers to a full range of abilities including planning, organizing, goal setting, flexibility, self-regulation, inhibition and self-maintenance.

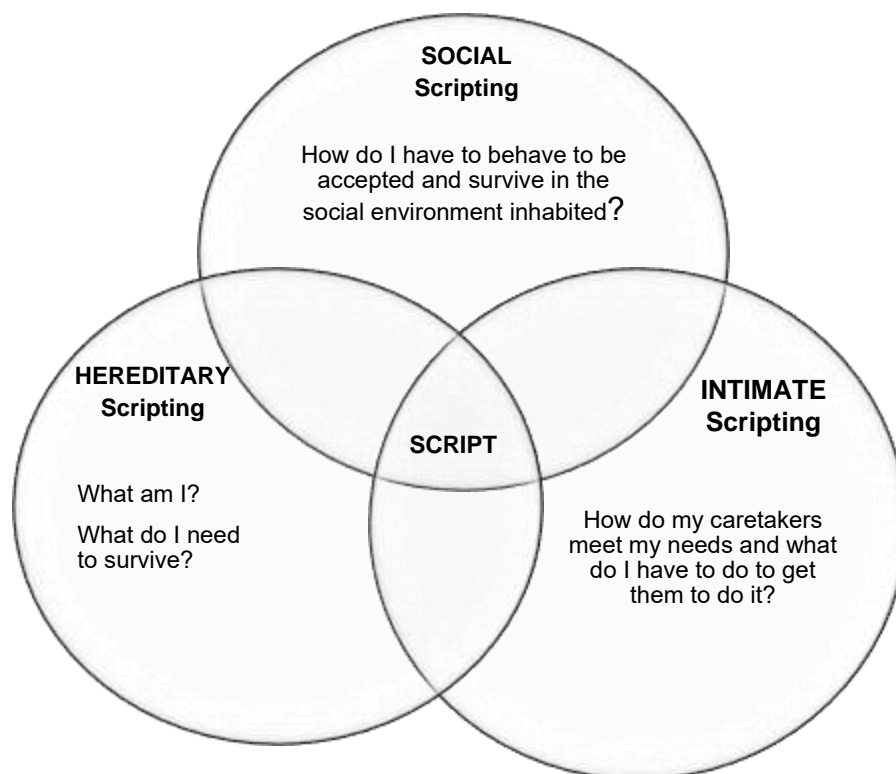


Figure 5: The Three Script Modules

The functions performed by this Self are also those of the organization and control mechanisms of the persona. These cognitive processes are mediated by the frontal lobe. and as the frontal lobe completes its formation, around 19 years of age (Tanaka et al 2012), this Self will be able to express itself fully at this time.

Notwithstanding as the frontal lobe intensifies its development at adolescence (see Figure 6), the conscious Self starts to audit the values and behaviours incorporated and treatment received, based on caregivers' actions, as to their adequacy in satisfying the needs directly. This can manifest itself, at this time, by the disqualification of caregivers, redecision, and/or adoption of defence mechanisms that can be classified as pathology.

The needs that arise, as this Self reaches full expression, are to give significance and purpose to its existence, intellectual and ethical development, and the need to love and be loved.

This Self expresses sentiment such as empathy, self-esteem, happiness, compassion, love. Not expressing emotions, however, it can give information, protection, and permission to assist the adequate expression of natural emotions by the Natural and Social Selves, and neutralise inadequate learned emotions and the resulting chronic stress.

Formation of Ego States

Ego state behaviours are expressions of the reactions to perceived stimuli as interpreted by the central neural system (Llinás, 2001) to maintain physiological and psychological homeostasis, meeting needs. Note that the reactions will depend on the degree of development and adequacy of the organs and other physiological components.

The formation and evolution of the ego states are therefore intimately related to the formation and evolution of the Selves and central neural system and the environment in which they occur. It is also interesting to understand the distinction made between structure and function.

Development of Structure and Function of the Child Ego State

Structurally, the behaviours that constitute the Child ego state originate in the Natural Self. It will, therefore, contain autonomic involuntary and voluntary behaviours. The visible clues as to which ego state is operating are words, tones of voice, gestures, postures, and facial expressions (Berne, 1961).

The autonomic involuntary behaviours are not always visible, but they can be perceived by the physiological effects caused. The transmission of impulses through the peripheral nervous system to the central nervous system may not be visible, and the interpretation of these stimuli and the emission of neurotransmitters to promote organic reactions to the stimulus may also not be visible. However, the physiological implications of the organic reaction may be measurable and visible.

Two simple examples. We may not see the neural system telling the heart to beat at a certain level, yet we can measure the heart beats per minute. It is not readily visible, either, when the amygdala receives and interprets a stimulus and communicates with the hypothalamus, that then sends messages to the different glands and organs to produce certain hormones that provoke organic reactions. However, we can see the effects in facial expressions, gestures, posture and tones of voice that can be classified as emotions.

Therefore, as invisible as it may be, the Free Child or Natural Child will be structurally present, directly or indirectly, in all behaviour.

Functionally the Adapted Child is developed and functions independently of the Free Child and is the effect of the Social Self (Parent ego state). In other words, the principal caretakers indication of the 'acceptable' behaviours and implicit values to use to meet the individual's needs, and the individual's interpretation of the insistence that these behaviours be used, create the adapted behaviours that compose the Adapted Child ego state, as a direct result of Parental influence.

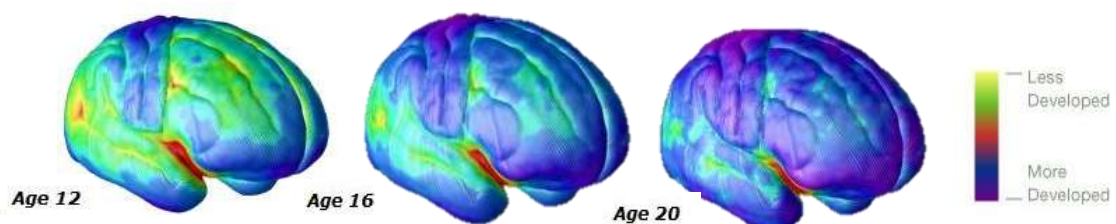


Figure 6: Stages of the Conscious Self (based on Gogtay et al, 2004)

As we will see in the next section, it is my belief the Adapted Child is best expressed as part of the Parent ego state and not part of the Child ego state.

Development of Structure and Function of the Parent Ego State

Structurally the behaviours that constitute the Parent ego state originate in the Social Self. Typically, the Parent ego state will start manifesting itself towards the end of early childhood, around 18 months of age, and will be intensely present after that. The behaviours manifested and classified as being those of the Adapted Child are automatic conditioned responses to the perceived stimulus as interpreted by the Social Self's neurological circuits. The interpretation, as indicated above, in the corresponding section, is based, in infancy, on the reactions and values expressed by the caregivers, interpreted and stored in the corresponding intrinsic memory. They are, therefore, triggered as an automatic response to meet needs, that were registered as the accepted behaviours that would not produce confrontation and the consequential negative effects..

The Parent Self stores the values, actions and information communicated by the caregivers as interpreted by the individual. These constitute the basis for social survival in the environment in which the individual operates. Based on the interpretation of stimuli, these values and information will trigger the stored conditioned behaviours, and the Adapted Child appears.

We can, therefore, conclude that the Parent ego state creates the Adapted Child and is the trigger for automatic adapted conditioned behaviour. Figure 7 represents the formation of the Parent, and Adapted Child ego states.

Development of Structure and Function of the Adult Ego State

Although present at birth, the Conscious Self that originates the behaviours classified as being those of the Adult ego state will become more visible in adolescence and as the individual strives to break the primary symbiosis and acquire the information to operate in the here-and-now on their own. This ego state can be predominant and govern the individual's behaviour (see the executive brain function at Figure 8).

The behaviours of the Adult ego state are those that distinguish us from the rest of the animal kingdom. This ego state is the essence of the individual being. It can supervise the functioning of the Free Child ego state, filtering and retaining the adequate behaviours required for its survival, changing forms of meeting basic needs so that they can be satisfied directly.

It can review adapted conditioned behaviours to identify the adequacy of these to the here-and-now, adjusting them and/or adopting them as being adequate. It can review caregiver guidelines, values, actions, expectations, and permissions or limitations. It can adjust them to realities of the here-and-now and retain those that are consistent and adequate for the individual's healthy well-being.

The Adult ego state, based on the Conscious Self, is, therefore, the true expression of the individual's Being. It constitutes a summary of the other ego states, as analysed, filtering, and adjusting them to meet needs directly in the here-and-now. This form of viewing the Adult ego state is registered as being that of the Integrated Adult.

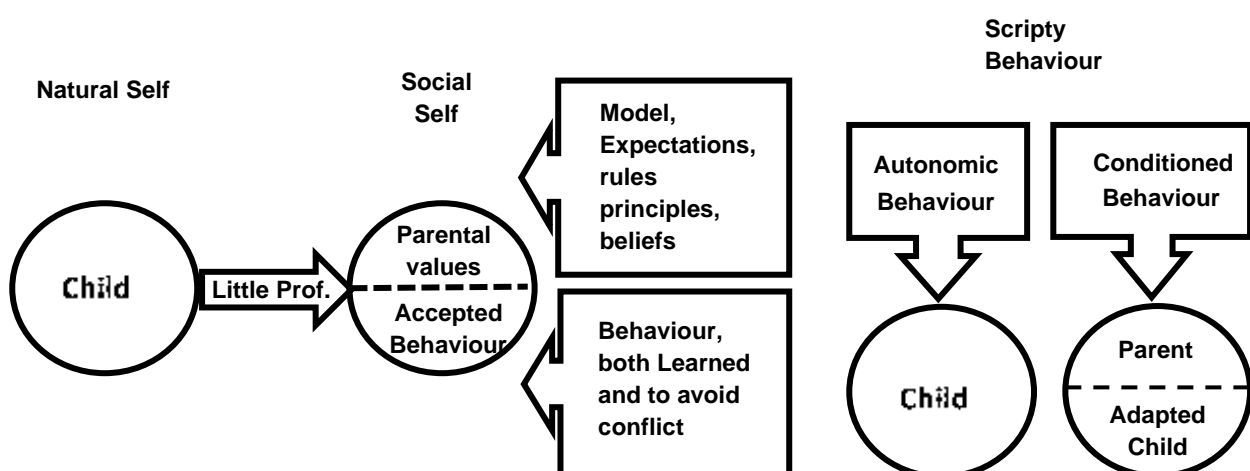


Figure 7: How Parent creates Adapted Child

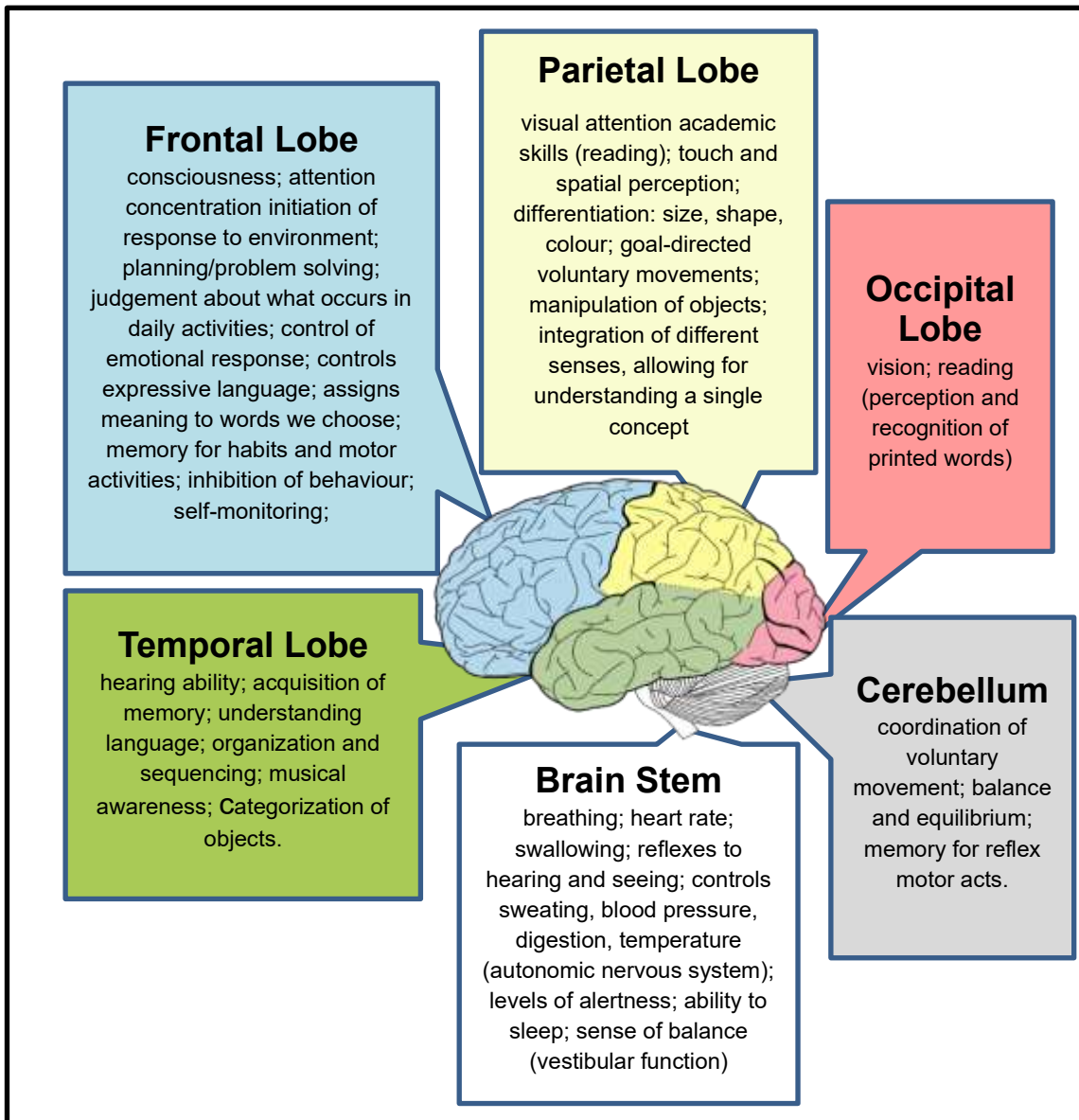


Figure 8: Executive Brain Function

Considering that this ego state's neurophysiological behaviour originates from the interactions between the superior frontal lobe, inferior frontal lobe, parietal lobe, occipital lobe, temporal lobe, and their specific functions, it is difficult to view a structural Adult ego state that is not Integrated (see Figure 4). Adult behaviour is based on proprioception of Free Child autonomic behaviour (pathos), reviewed and accepted Parent ego state information and Adapted Child behaviours (ethos), and superior analytical capacities based on sustainable information (technos). These integrated behaviours are present even in early childhood, notwithstanding they will become evident and accessible in adulthood, as the frontal lobe reaches maturity.

Ego State Contamination and Decontamination

The following section is based on over 40 years of my working with clients. It reflects the conclusion I have reached for what contamination is, how it works to reinforce scripts, and what decontamination is all about. Considering the neurophysiological components involved and their interaction, contamination is always double.

Theoretically, I understand the possibility that contamination, considering the definition of ego states, could be considered to occur as one ego state contaminating the Adult; however, the behaviour produced by contamination indicates that all three ego states are involved.

Contamination is initiated by Parental interpretation of a here-and-now stimulus, generating a delusion, that triggers an Adapted Child illusion, based on past experiences, to be dangerous for its well-being. The Natural Child experiences this imagined threat as though it were real (psychic equivalence), and hence activates fight or flight mechanisms. The intensity of the situation absorbs psychic energy, limiting the Adult ego state's intervention. The Adult ego state is seen as being contaminated when in reality it is not being activated and left with little psychic energy.

As the situation develops and the Adapted Child reacts with an inadequate behaviour to the here-and-now, the results will end up confirming the parental injunctions and therefore advancing the script. This is because delirium creates phobic reactions that trigger emotional responses through psychic equivalence that inhibit here-and-now adult behaviour (see Figure 9).

When we decontaminate, we use the Adult ego state's executive function to promote the liberation of the Natural Child and supervise the adequacy of its behaviours to be acceptable in the context in which

they occur. We also promote the adequacy of the Parent to the here-and-now, so that its value system and the behaviours it allows and sponsors will contribute to the direct satisfaction of latent needs. It becomes evident that the Parent is the contaminator, that triggers the Adapted Child's fantasies that inhibit the Natural Child from operating adequately and introduces injunction-based information in the Adult. Thus, contamination is always double.

The implications are that we intervene in the Social Self to be able to permit the Natural Self and the executive Conscious Self to operate correctly.

Script formation

I believe that the dominating effect that scripts have on people's lives is because they are life plans that are established to permit the survival of the individual.

As scripts are based on trial-and-error experimentation, be it hereditary or present life experiences, they operate on an autonomic and/or conditioned basis. Therefore, a hereditary script initiates at conception (to permit existence) and continues to be developed throughout the individual's life (to permit survival).

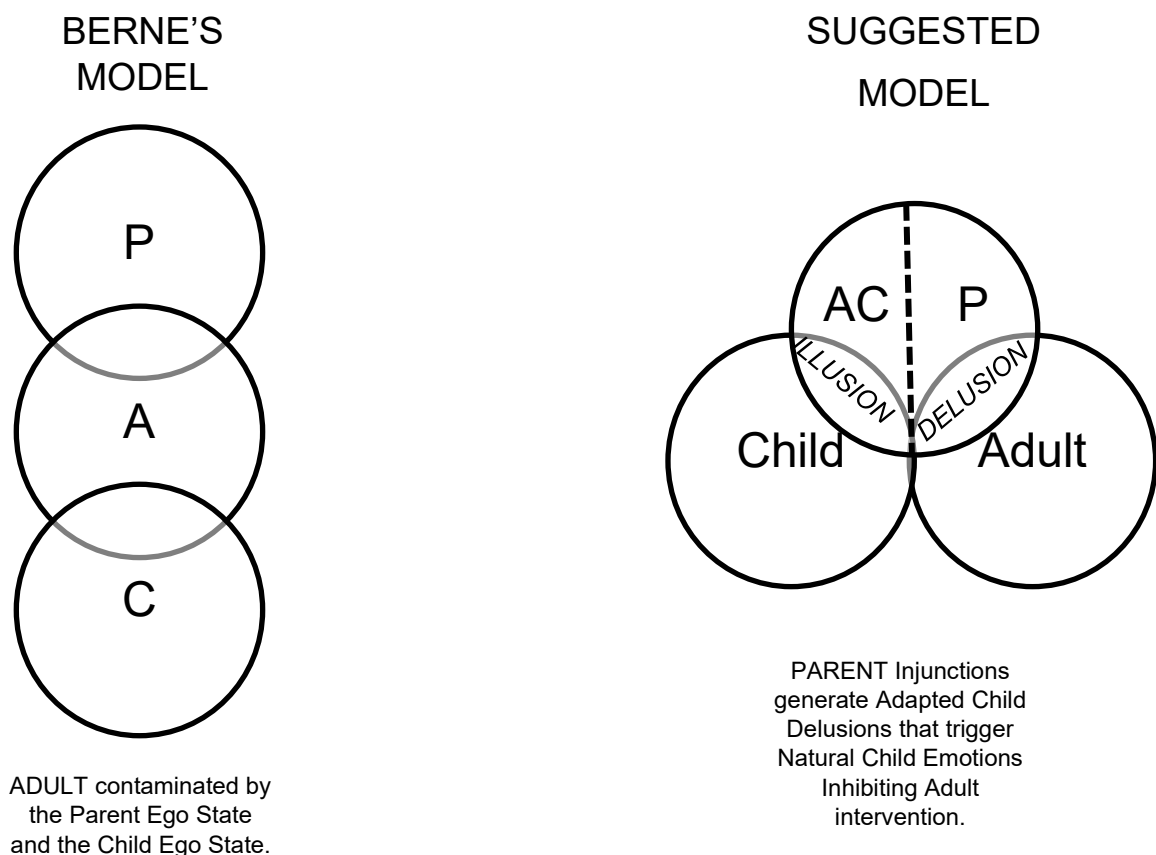


Figure 9: Suggested Model of Adapted Child within Parent

Scripts contain the set of actions, values, principles, beliefs (about us and others), and basic norms of behaviour to be taken to meet needs, to meet expectations and to survive in the environment we inhabit.

They are the 'rules' that must be followed and adopted as guidelines and premises to govern our existence. These rules may be adequate or inadequate. They are adequate when meeting needs directly and inadequate when not meeting them. They may also be appropriate or inappropriate depending on the context within which they occur.

These rules are stored in different memories, at different times in the individual's development process. The memories involved have different characteristics and are independent of each other. Each uses different neurophysiological areas and has unique functional capabilities and accessibilities. Therefore, to access and/or intervene in these memories different techniques and methods need to be used.

This being the case I will now identify the significant script developmental instances and the memories involved, based on the physiological development of the central nervous system:

1. **Hereditary Script** answers the question 'What am I?' and 'What do I need to exist?' and is transmitted, incorporated, and stored in the genetic memory. This script initiates its expression at conception and is used to form the individual, organizing the cellular growth and structuring of the different organs and systems that will permit development and survival. It will also be responsible for physiological homeostasis and adequate functioning of the Natural Self. The contents of this script tend to be autonomic and involuntary. To access this memory specially designed multi-facet strategies and methods may be required, involving physiological, kinetic, pharmacological, medical, and sensory actions.

2. **Intimate Script** answers the question of 'What must I do to survive?' Its formation is initiated around 18 months after birth, when the superior brain formation is complete. As indicated in the corresponding section referring to the formation of the Social Self, this script is stored in the intrinsic ontogenetic memory and contains the actions required to survive in the intimate environment to which it is tied. It will continue to incorporate traumatic experiences that the individual identifies as life-threatening (psychic equivalence). This memory is activated by the perception of stimuli that trigger the memory of the situation lived, along with its emotional content. It can be accessed by the interpretation of stimuli. The content

of the script tends to compel the individual towards automatic compulsive adapted behaviours identified to avoid conflicts and protect the self.

3. **Personal Script** (ages 3 to 9 years) answers the question of 'Who do I have to be, to be okay, and accepted in my intimate nuclei?' The content of the script is stored in the intrinsic, if traumatic, and extrinsic ontogenetic memory. It is designed to protect the individual as described in the section referring to the Social Self and constitutes what may be called the personality. This memory can be accessed cognitively. The contents of this script, although leading to compulsive behaviours, can be accessed consciously.

4. **Social Script** (ages 9 to 17 years) answers the question 'What is my social identity, hierarchy, and what is expected of me?' This content is stored in the extrinsic ontogenetic memory and can be accessed biographically.

5. **Geopolitical Script** (19 plus years old) answers the question 'What is my place in the world and what do I need to succeed?' (economically, politically, geographically, ideologically, religiously). The content is incorporated into the extrinsic ontogenetic memory. It can be accessed biologically and tends to be conscious behaviour.

Figure 10 represents an individual script with its components: (the lines separating the different script segments indicate the permeability and facility in accessing).

Script Intervention Strategies

Script intervention strategies require identification of the segment in which originates the behaviour which is contracted to be adopted, neutralised, or modified, and which other segments are affected. It has been my experience that the cause will reside in one segment but the effects will manifest themselves in one or more segments. The importance of this understanding resides in the fact that the methods appropriate to be effective in intervention of the different segments is rarely the same in procedure, quality and intensity.

For example, if the contract is limited to modifying a specific behaviour (effect) then we can work within a given method. However, if the contract is to eliminate or neutralise negative script effects on the client's healthy well-being, then we will need to identify where the cause resides and not limit ourselves to working with the manifested behaviours. The latter will then require, on our part, the ability to work with different methods, formulating an intervention strategy that will integrate different procedures and may require the intervention of different professionals with specific skills, as will become evident in the following examples.

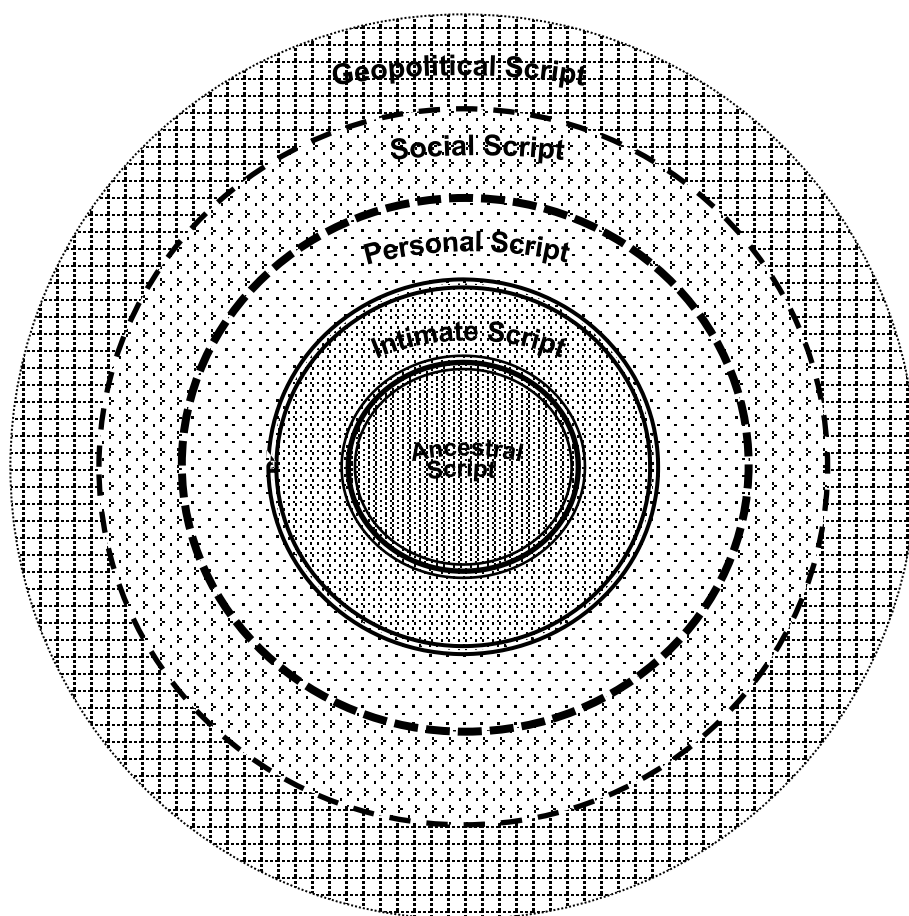


Figure 10: The Components of an Individual Script

If in the **Hereditary Script** (genetic memory), the methods chosen to change behaviours can be related to medical, psychiatric (medication that inhibits the production/absorption of neurotransmitters and/or promotes them), physiotherapeutic methods such as EMDR (Shapiro, 2001) that use sensory stimulation can activate primal instructions/memories, to be cognitively managed with TA, musicotherapy, bioenergetic, nutritional, etc.

It is important to note that the autonomic brain does not distinguish between reality and fantasy. Therefore, emotional physiological responses to perceived stimuli originating from other script segments can and will activate involvement of this segment, causing involuntary behaviours and affecting the physiological healthy well-being of the client (psychosomatic influence).

Using stress as an example: **healthy stress** is short-lived, initiating when a stimulus is transmitted through the central nervous system and is interpreted by the autonomic brain as indicating that the individual is in harm's way. Our autonomic brain prepares our organism for flight or defence (fear/anger), thus

activating the sympathetic nervous system by liberating the neurotransmitters required to produce the physiological responses necessary for protection and survival. When the cause for the existence of the stimulus ceases, a new stimulus is transmitted indicating that the individual is no longer in harm's way and our organism returns to its normal functioning.

Chronic stress is long-lasting, when the perceived stimulus activates a latent need and is interpreted, based on past experiences in other script segments, as being harmful to the individual's psychological healthy well-being. It interacts with the autonomous nervous system indicating that the individual is in danger. The autonomous nervous system activates its natural procedures to defend the individual's survival. The problem arises when the individual does not implement the physiological responses for which the hormones were liberated. As the mechanical effects required (flee or fight) are not being used to eliminate the hormones, they then continue to influence the organs and organ systems so as to inhibit their normal functioning. This will bring about negative physiological effects.

Considering the stress examples given above, if the patient were to be treated for high blood pressure caused by healthy stress, through medication in a short time he would be returned to a healthy situation. However, if chronic stress caused the situation, the medication would be reducing the effects and not eliminating the cause and will therefore not be resolving the situation but only mitigating it.

It is evident that when we want to resolve a situation, we need to identify the cause. Is it a physiological homeostatic or a psychological homeostatic? The first will be indicative of the hereditary script segment and the second would be indicative of another segment.

If the **Intimate Script** (intrinsic unconscious memory) is involved, the method chosen requires the identification of the stimulus that trigger the undesired behaviour and to duplicate it in controlled circumstances, in order to be able to neutralise the emotional impact and permit the identification of adequate behaviour that can substitute it and be conditioned in its place. In my experience EMDR, developed by Shapiro (2001), together with cognitive assertive TA, has proven to be effective. Also, Gestalt therapy (Perls 1969) together with TA using flexible methods is proven to be quite effective.

Personal Script (extrinsic preconscious memory) may respond to cognitive psychotherapeutic methods, and especially TA in its many facets can be effective.

If the **Social Self** (extrinsic biographical memory) is involved, cognitive TA counselling methods can be applied.

Finally, if the **Geopolitical Script** (extrinsic conscious memory) is active, TA coaching methods are appropriate.

It also seems that to be effective, multidisciplinary methods and models should be developed and used. Considering that professionals have their own specific and special capabilities with certain techniques, procedures or models, it is important to be able to integrate with professionals of different specialties to be able to contribute to the fulfilment of our client contracts.

Conclusions

Based on the content in the body of this article we can conclude that:

- All behaviour is significant and directed to the satisfaction of a latent need.
- Behaviour should be classified as adequate when the behaviour satisfies the need directly, or inadequate when the behaviour does not meet the need directly even if producing a pleasurable experience.

- Ego states are useful tools to be used with clients, as Eric Berne indicated. However, practitioners need to understand the neurophysiological interactions that produce the behaviours, to be able to intervene in identifying causes from effects, and the elaborate strategies and tactics to meet contracted behaviours.
- The Physiological Self (Natural Child) is present in all behaviour on a 24/7, 365-day basis.
- The Integrated Adult ego state, representing the conscious self, is the executive power required to implement and support all forms of intervention.
- Scripts are necessary to survive, are continuously formed and adjusted, and can be divided into instances for intervention purposes.

This article identified the physiological, neurological and psychological determinants that arise from constraints imposed by both genetic and environmental factors, originating human behaviour.

The determinants, called Ego Selves, that organise the phenomena that Eric Berne classified, structured, conceptualised, and defined to mould transactional analysis and design instruments to assist professionals and clients to adjust behaviour, have also been analysed.

A different form of presenting the Adapted Child, differentiating it from Berne's model where the Adapted Child is shown as a part of the Child, was presented. Parent-Adapted Child, and the Adult ego states, adjusting their manifestation and organization to the physiological development of their corresponding ego self, were identified, proposing that the Adapted Child is a part of the Parent ego state.

Contamination was reviewed and adjusted for consistency between cause and effect. I propose that the contaminating ego state is the Parent ego state that is creating a delusion based on injunctions and this generates an illusion in the Adapted Child portion of it which in turn causes the Natural Child's emotional reaction, considerably limiting the Adult ego states capabilities to intervene.

Script analysis was reviewed and organised, indicating that the script is a life plan initiated at conception and ends at death. It is indispensable for survival, having adequate and inadequate segments that may limit lifespan and quality of life. Occurrences, neurophysiological factors, and memories involved in their development and implementation were also identified.

Suggestions and examples for the integrated development of intervention strategies and tactics to adjust behaviours and fulfil contracts were presented in the corresponding section.

Finally, when we feel, our primal natural self (body), based on the past, is active; when we think, our conscious self (brain), in the here-and-now, is active. Our art, as practitioners, is to integrate the two to promote pleasure, well-being and happiness.

We need to remember that pleasure is obtained by meeting our body's needs, well-being is obtained by meeting our social needs and happiness arises when our conscious needs are met.

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Deconfusion of the Child ego state - An examination of the main contributions and how redecision adds to the literature

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Abstract

This paper examines some of the main writings about deconfusion of the Child in the transactional analysis literature. It seeks to show how each approach defines the goals of deconfusion and the methods by which deconfusion is obtained. In doing this it clarifies the three methods which Berne proposed could be used for such deconfusion. It also attempts to show how redecision therapy adds to the literature on the topic, which to the writer's knowledge has not been done before.

Key words

deconfusion, redecision therapy, psychoanalysis, empathic transactions, therapeutic relationship, regression, feelings, emotions, interpretation, decontamination.

Introduction

Eric Berne (1961) first mentioned the idea of deconfusion of the Child ego state quite early in his writings. Since that time the concept of deconfusion of the Child has been used by a number of others over a long period. Indeed Widdowson (2010) refers to deconfusion as one of the 'backbones' or central tasks of transactional analysis (TA) therapy. The different writings have unfortunately and ironically led to considerable confusion about this idea of deconfusion. This article seeks to show some of the main alternate ways the concept has been used so as to give an overall understanding of how deconfusion of the Child can occur. It is by no means a complete review of the literature on deconfusion of the Child. Instead it seeks to identify some of the main contributors to this topic in the literature and the themes of what they are saying.

The idea of deconfusion of the Child was been embraced in particular by the relational TA approach and particularly by Hargaden and Sills (2001). However this has not happened with redecision therapy. Goulding and Goulding said almost nothing

about this. There is only one very brief mention by Robert Goulding (1981) where he says that true change occurs when the Child is deconfused. This paper seeks to remedy this omission and examine the significant ways the redecision approach adds to the literature on deconfusion of the Child.

Berne's view of deconfusion

In his description of Mr. Segundo's case, Berne (1961) states that through structural analysis the Adult ego state becomes dominant in the personality and then a pragmatic cure has been obtained. In a later book (Berne 1972) he writes "In transactional analysis, the Adult is enlisted as an ally as soon as possible and proves its worth." (p.378). Once done then one has the option to use psychoanalysis and/or regression analysis to deconfuse the Child ego state. This may be used after the transactional analysis treatment or not.

In Berne (1966) he reiterates this process in his discussion of the eight types of therapeutic operations and their therapeutic goals. The first six - interrogation, specification, confrontation, explanation, illustration and confirmation - are about strengthening the Adult through decontamination. The seventh - interpretation - is about using psychoanalytic interpretation to deconfuse the Child. The eighth - crystallisation - is the final stage of pure transactional analysis and is not designed to deconfuse the Child. In the literature there is some confusion on this point as some writers do include crystallisation as a technique for deconfusion of the Child. This final stage of treatment can occur whether there has been deconfusion of the Child via interpretation or not. This stage is where the therapist is assessing and preparing the client to terminate therapy. This is where the final decision to get well is made by the client and if there is crystallisation then as Berne (1966) puts it, the "...son announces at the age of forty that he is finally leaving home to get married." (p.246).

Back in 1961, Berne proposed that one way to do deconfusion of the Child is by psychoanalytic interpretation and then suggests a second way to deconfuse the Child using the technique of regression analysis. Erskine (2003) has also raised the idea of Berne proposing regression analysis as a means to deconfusion. Upon closer examination we find significant evidence that Berne did actually use regression analysis as a way to deconfuse the Child ego state.

Firstly he reports that psychoanalytic cure means deconfusing the Child with a largely decontaminated Adult as an ally. He goes on to say, "In hypnosis, the mother and the governess are metaphorically sent out of the room and later the therapist tells them what the Child said. In psychoanalysis the Child speaks in their presence and they hear it first hand. Regression analysis, which will be discussed later, retains the same advantage, while at the same time appealing more directly to the Child." (p.173). Furthermore Berne later mentions the work of Franz Alexander who describes the "corrective emotional experience" and then says, "In structural terms, Alexander's principle is a psychoanalytic one, since the aim is to deconfuse the Child," (p.174).

To further clarify the deconfusing effect on the Child by using regression analysis as a corrective emotional experience, Berne quotes the report by a patient called Iris: "You know, since yesterday I've felt clearer than I have for years. It's as though I were emerging out of a fog. Recognizing the Child is one thing, but actually experiencing it is another. It's frightening. Knowing that it's my Child doesn't make it any more comfortable for me, but it does relieve me: at least I know where those feelings are coming from" (p.249-250). This quote clearly show that her Child ego state is now less confused.

Regression analysis as described by Berne is a technique that allows for the cathartic expression of the Child ego state's thoughts and feelings. There is an emotional expression from the Child where an abreaction and working through can take place. "Phenomenologically, the Child appears as a discrete, integrated ego state."(p.247) and "Here it is not the Adult talking about the Child, but the Child talking itself."(p.248). In regression analysis the Child is given the opportunity to have the cathartic expression of emotions with the goal to deconfuse that Child ego state. This allows the previously buried Child ego state to be "...permanently at the disposal of the patient and the therapist for detailed examination."(p.248). That examination allows for interpretations to take place and in addition it allows for an abreaction and working through of the emotions.

Moving on to 1966 again, it is interesting to see Berne (1966) also say, "Regression analysis, in which the

therapist, in to order activate and decontaminate the patient's Child, cathects his own Child ego state" (p.314). All along Berne has spoken about the decontamination of the Adult ego state and not the Child ego state. He is very clear that it is the Adult ego state that is decontaminated and not the Child ego state and that after decontamination has taken place then the therapist strengthens the boundary between the Adult and the Child. Decontamination takes place in the Adult and deconfusion takes place in the Child. One could only assume that Berne used the wrong word here and meant to say, 'regression analysis is used to activate and deconfuse the patient's Child'.

In summary Berne proposes the three following ways for deconfusion of the Child:

- orthodox psychoanalysis using the therapeutic operation of interpretation
- interpretation through regression analysis
- cathartic expression of emotions which permits the working through of the Child's thoughts and feelings.

Subsequent contributions to the literature

The following material is summarised in Table 1 showing methods and goals, and Figure 1 showing a flowchart of the development of theory.

Erskine (1973) writes about the six stages of treatment. In the second stage he talks about the deconfusion of the Child. He proposes that this involves the client gaining awareness of feelings. This is achieved by the therapist offering protection and permission to the client.

This is a significant departure from what Eric Berne proposed. It has nothing to do with orthodox psychoanalysis and interpretation as a stage of treatment after the transactional analysis treatment and decontamination have been done. However his proposal of deconfusion as a way to gain awareness of feelings is similar to Berne's idea of regression analysis and deconfusion about feelings by 'working them through'.

Osnes (1974) says that deconfusion of the Child can be achieved by giving the client an experience of nurturing and warm caring. This will then replace the traumatic hurt that was experienced as a result of the original parenting. Osnes is using the concept of deconfusion of the Child in a very different way to Berne. He is the first to present the idea of a warm empathic therapeutic relationship as a means for deconfusion of the Child.

Woollams and Brown (1978) discuss stages of treatment and cite that stage four is deconfusion of the Child. The goal of this stage is to deconfuse the client's

Berne 1961 & 1966
Deconfusion of the Child (Two methods)

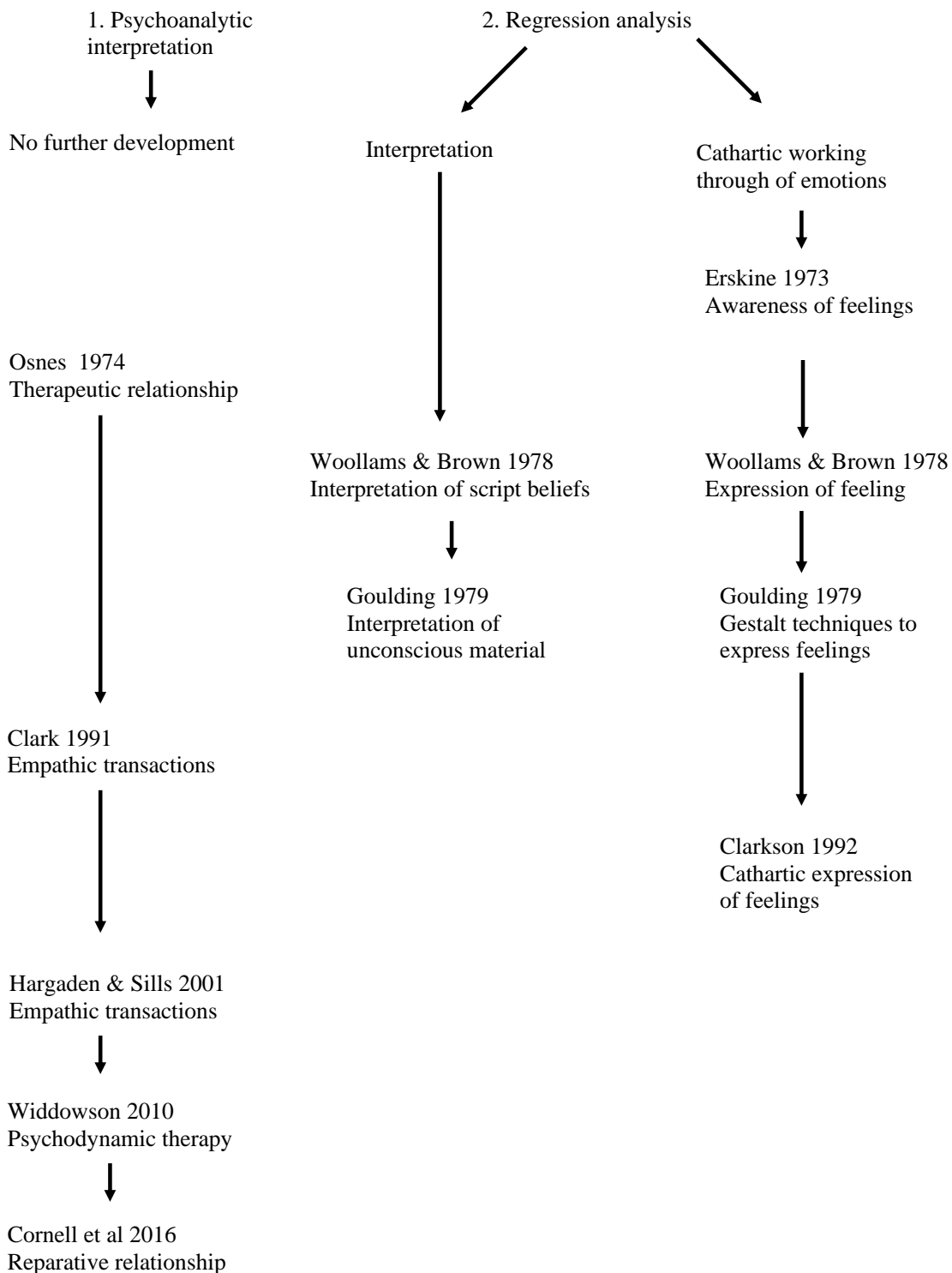


Figure 1: Deconfusion of Child: Development of Theory

Theorist	Method of deconfusion	Goal of deconfusion
Berne -1961 & 1966	1. Psychoanalytic interpretation 2. Regression analysis interpretation 3. Regression analysis catharsis 4. Deconfusion is a long-term analytical process.	1. Understanding of the previously buried Child ego state material 2. Working through of emotions for a better understanding of feelings
Erskine 1973	Offering protection and permission	Awareness of feelings
Osnes 1974	New relationship experience of warmth and caring	Replace original traumatic hurt
Woollams & Brown 1978	Techniques and questioning to identify script material. Deconfusion can be achieved in a single piece of work or can occur over a long period of time.	1. Get in touch with unmet needs and feelings 2. To develop internal sense of safety 3. Get client ready for redecision
Goulding 1979	1. Interpretation of unconscious material through interrogation and regression analysis 2. Working through emotions by regression analysis	1. To become aware of unconscious script material in the Child developed from early experiences 2. To discover what they are feeling and who or what they are feeling it about 3. Get the client ready for a redecision
Clark 1991	Creating an empathic bond through the use of empathic transactions	To increase the client's sense of legitimacy and safeness about its needs and emotions
Clarkson 1992	The cathartic expression of emotions by the Child	To understand and clarify the thoughts, feelings and belief of the Child.
Hargaden & Sills 2001 & 2002	By facilitating the unconscious processes of the client to enter into the transference relationship, this is then analysed along with the therapist's counter transference reactions.	To bring the dormant, archaic and conflicted unconscious parts of self into the conscious
Widdowson 2010	By the use of empathic transactions in the transference relationship.	To resolve early childhood experiences and the feelings associated with those.
Cornell et al 2016	The client 'uses' the therapist to relive old relationships in the therapeutic relationship.	To transform old feelings into new manageable ones.

Table 1: Deconfusion of Child: Method and Goal

Child by “ helping her get in touch with and express unmet needs and feelings and to help her develop an internal sense of safety sufficient to make a redecision.” (p.262). They suggest using techniques and asking questions which will bring unconscious information to the foreground for the client. Previously unconscious script beliefs are brought into awareness. It is the preparation of the Child ego state for a

rededecision to occur. That preparation is done by assisting the client to get into touch with and express their unmet needs and feelings. This is similar to Berne's idea of regression analysis. Also there is agreement with Erskine about deconfusion being used to clarify and understand feelings. Finally there is a similarity to Berne in terms of questioning the client to seek out the unconscious beliefs and thoughts.

Clark (1991) says deconfusion is necessary for traumatically fixated Child ego states. She also states that a child needs to be deconfused about the legitimacy and safeness of its needs and emotions. Deconfusion is achieved by creating an empathic bond and through the use of empathic transactions. Through the therapeutic bond the client starts to believe their emotional states and needs are understood by the therapist and this is what she calls deconfusion. She says that once the empathic bond is established then the early ego states are available for therapeutic work and deconfusion. This bond must first be established because if therapy proceeds without such a bond occurring then the archaic child needs will go underground because the Child will experience being rebuffed and then become inaccessible for deconfusion.

As White (2021) has shown, Clark's view is indicative of catastrophizing beliefs systems about the Child ego state of the client. It is a significant underestimation of the resilience of the average client, who can handle many therapeutic techniques such as decontamination, like Berne would do before a deep therapeutic bond has been formed. The Child ego state of the average client will not feel rebuffed or go into hiding as a result of them.

This is also a significant departure from what Berne describes as deconfusion. As Osnes proposed, we have the view that deconfusion of the Child is achieved by using the therapeutic relationship. Berne never made any mention of this. Clark mentions nothing about the use of psychoanalytic interpretation with the Child and says in her view the confusion is about the safeness and legitimacy of needs and emotional states.

Clarkson (1992) is of the view that deconfusion results from the thoughts, feelings and beliefs of the child being given expression in order to be understood, clarified and given their rightful place. She clearly equates the cathartic expression of emotions with deconfusion. This has some similarities with Berne's idea of regression analysis for deconfusion using abreaction and the working through of emotions but the idea of using the expressions of the Child ego state for detailed examination for psychoanalytic interpretation is never mentioned

Hargaden and Sills (2001, 2002) follow on directly from the proposal by Clark on the importance and role of the empathic relationship for deconfusion of the Child ego state. For example, they note that the therapist must be emotionally available to let parts of the client impact on them as this allows the client to integrate split-off parts of self. Also, the therapist must pick up on the unmet relational needs and then respond appropriately. This is the process for facilitating deconfusion in the Child.

They clearly suggest an interpretative role for deconfusion of the Child which is consistent with Berne's original idea. One uses the analysis of the transference relationship and the transference neurosis to bring the unconscious archaic and conflicted parts of self into consciousness. The therapist facilitates the client to bring their own Child ego state experiences, feelings and sensations into the therapeutic relationship. The therapist remains aware of their own countertransference reactions to those and then an analysis of this allows for the unconscious material of the client to arise into the consciousness of the client.

Hargaden and Sills highlight the fact that Berne said in treatment that decontamination comes first and deconfusion follows. They suggest that this is an artificial split between decontamination and deconfusion and that deconfusion using the empathic relationship occurs right from the beginning of treatment. In one sense they have to conclude this as their approach is wholly based on using the transference to facilitate cure in the client, so the therapeutic alliance is the central focus of treatment right from the beginning. If deconfusion is done via the therapeutic relationship, ergo, deconfusion must occur from the beginning of treatment; there cannot be a period of time whilst decontamination is done before the therapeutic relationship can be used to deconfuse the Child ego state.

As further evidence for this, they use a similar rationale to Clark's (1991). You cannot first do decontamination before a strong therapeutic alliance has been established because the client will feel overwhelmed and attacked and therefore either leave therapy or simply adapt to the therapist. As mentioned above, in my view this represents catastrophizing beliefs and the average client is far more robust than that and can easily handle decontamination techniques before the empathic relationship is established to the degree they say it has to be. Eric Berne successfully did that for fifteen years and Goulding and Goulding did it for twenty years. As mentioned before about Clark, this is a significant departure from what Berne originally proposed as to the nature of deconfusion. He never discussed empathic transactions and the transference relationship as a method, or that it even plays any role in deconfusion of the Child.

Widdowson (2010) makes some good clarifying comments about how deconfusion and decontamination are separate and how they are connected. "Structurally speaking, decontamination is a process involving the Adult ego state, and deconfusion is a process involving the Child ego state." (p.273). He proposes that deconfusion would be part of the process that occurs in psychodynamic therapy especially in the area of transference analysis.

He supports the view that empathic transactions in the therapeutic relationship are what result in deconfusion. As to the goal of deconfusion, he provides an interesting new perspective when he talks about deconfusion in relation to the formation of script beliefs. The young child has early traumatic experiences and the resulting feelings get connected to these experiences. Deconfusion is aimed at resolving those early experiences and the feelings connected to them.

Cornell, de Graaf, Newton and Thunnissen (2016) see deconfusion as disentangling the Child ego state from emotional beliefs and forces from the past, related to early needs that have been insufficiently met or damaged. The client is deconfused by using a reparative relationship with the therapist where the client 'uses' the therapist to experience and process the old rejecting feelings and the therapist helps the client transform these into a manageable form within the client. "The therapist works with her (own) and the client's images, fantasies and feelings which are called up during the transference relationship." (p.80). Again, a significant departure from what Berne said about deconfusion but following the theme from Clark, and Hargaden and Sills, in using the transference relationship as a means to deconfuse the Child.

Redecision therapy and deconfusion of the Child

Upon studying deconfusion in depth it became apparent just how much rededication work is actually deconfusion of the Child. Like Berne, Goulding and Goulding (1979) had an aversion to longer-term psychoanalytic types of therapy. Indeed, this could explain Berne's ambivalence to deconfusion of the Child that is noted by Hargaden and Sills (2001). "However, he also revealed an ambivalent attitude toward working with the dynamic Child, sometimes referring rather dismissively to the 'luxury' (p.149) of analysing the Child and at other times suggesting deconfusion as a phase of treatment". (p.55).

I agree with their observation about the ambivalence of Berne on this topic and it is understandable. As Hostie (1984) notes, Berne broke away from psychoanalysis in about 1956 after another rejection on his psychoanalysis examinations. At that point he set about developing transactional analysis as a short-term solution-focused therapy. Many times he talked about curing people first and analysing them later. White (2021) explains how Berne, throughout his entire writings, raised the question of 'making progress versus cure'. He repeatedly questioned the validity of using longer-term analytic-type therapies like psychoanalysis which tended to just 'make progress'. For him to suggest using orthodox psychoanalysis as a way to deconfuse the Child is precisely what he was beginning to move away from at that time in 1961.

Thus, he had ambivalent views on the use of psychoanalysis for deconfusion because he was evolving a short-term solution-focused psychotherapy at that very same time.

Goulding and Goulding (1979) did however bring gestalt therapy into use with transactional analysis and thus we get deconfusion of the Child in a similar way to the regression analysis that was discussed by Berne. As stated above this allows for deconfusion by the second and third options: interpretation through interrogation and regression analysis; and working through of emotions by regression analysis.

When connecting and working with the client, Goulding and Goulding would use the therapeutic operation of interrogation where the therapist gets to know the client in relation to the topic that the client presents. This allows one to discover the Child beliefs and Parent prejudices. McNeel (1975) provides examples of how Goulding and Goulding would use interrogation to get to interpretation with the client. They brought to the attention of clients ways by which they were sabotaging self. For example, they would confront incongruities where the person's body language was incongruent with what they were saying. The verbal is the conscious speaking and the non-verbal (body language) is the unconscious of the client speaking. Thus they brought the unconscious of the client into the conscious. They would also ask clients to own their projections and would identify to the client when they were presented with a Parent ego state contract. McNeel also reports how Goulding and Goulding would separate myth from reality, "Many people carry with them a mythical view of reality in which they misperceive facts." (Goulding and Goulding, 1979, p.122). Goulding and Goulding would bring it to the client's attention when they were thinking in such magical ways and hence the unconscious would be brought into the conscious. The Child is being deconfused in this way.

Rededication therapy also uses a version of regression analysis, as Berne originally proposed, for the cathartic working through of emotions as a means to deconfuse the Child. This allows the client to realise what they are actually feeling and who or what they are feeling it about. This second option is similar to what Clarkson (1992) suggests as deconfusion of the Child through catharsis; Erskine (1973) also talks of deconfusion being an awareness of feelings. Through gestalt techniques the client can regress and often this will include the cathartic expression of emotions. Of course all this prepares the client for making a rededication, which can be seen as the third goal of rededication and concurs with what Woollams and Brown (1978) stated.

The two case examples below provide insight into common dialogue one would find in rededication therapy

at the interrogation and information gathering stage when the client is regressed.

Case example 1

Ronan: "I have a feeling of anxiety in my body." (feeling scared)

Therapist: "What does the body language say?"

Ronan: "I'm scared and leave me alone."

Through regression the client's Child ego state now understands his fear and his desire to be left alone.

Further discussion occurs about the feelings and thoughts associated with those feelings which leads to further discovery:

Ronan: "I am still hoping for love from my parents." "I feel anger about the past." (feeling angry)

Therapist: "Be that anger and talk."

Ronan: "Yes I am angry at them and how they withheld love. Now I also feel sadness about the past with them."

As Clarkson (1992) says, with the expression of emotion the Child can be deconfused as the feelings and beliefs are understood and clarified. Ronan has clarified his anxiety, anger and sadness as well as his hope for love from the parents.

Case example 2

Olive: "I have envy for my sister. My parents always treat her better than me, and they talk about her talents to others and never about me."

Therapist: "What do you feel now?"

Olive: "I am angry at my parents. I want them to stop it." (feeling anger)

Therapist: "Say more."

Olive: "I am also angry at my sister".

A few minutes later:

Olive: "And I am sad at my sister as she has many problems."

Through regression and catharsis Olive clarified and expressed her feelings of anger at the parents, anger at the sister and also sadness about the sister. Olive is now more aware about what she feels and who she feels it about.

Summary

As mentioned previously, Table 1 displays a summary of some of the main contributors to the concept of deconfusion of the Child, showing the method of deconfusion and the goal of deconfusion.

Figure 1 shows a flowchart linking the four different strands of understanding for deconfusion that have developed so far. Berne's suggested use of

psychoanalytic interpretation has had no further development whereas his idea of deconfusion with regression analysis has had many authors expand and further discuss those ideas. In 1974 a new strand began that was not directly discussed by Berne, using the therapeutic relationship to deconfuse the Child; there have been a number of further discussants on that topic.

Conclusion

It is indeed unfortunate that we only got thirteen years of writing on transactional analysis by Eric Berne before his premature death. Another ten years would have been good to see where his thinking evolved to. At the beginning of the thirteen years he was still heavily influenced by psychoanalytic thinking and as a result deconfusion of the Child was viewed in that way, at least partly. As he moved away from psychoanalysis towards transactional analysis in his thinking, he became ambivalent about the deconfusion of the Child ego state by using psychoanalysis. The summaries found in Table 1 and Figure 1 show the developments over time of the idea of deconfusion of the Child ego state. Further developments will certainly occur in this area and many others. One of the reasons transactional analysis has endured for so long is that it allows for new developments in theory and practice.

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Development of a Psychological Game Questionnaire

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Abstract

A research study is described, conducted in Taiwan with 615 subjects across different ages, educational levels and occupations, to develop a questionnaire that will measure three components of psychological games: hidden messages or ulterior transactions, role switches on the drama triangle, and repressed emotions. A literature review is included and the development of the questionnaire through a pre-test option with 226 subjects is described. The results of statistical analyses are described and the final questionnaire, in English and in Chinese, is included as appendices.

Introduction

The research reported in this article was conducted by the author in connection with a Master's degree awarded by the National Chiayi University in Taiwan, under the Department of Counselling. It was stimulated by a suggestion by Marilyn Zalcman (1990) that professionals within the TA community needed to "Develop a limited number of basic paradigms (probably no more than three to six) for different types of games that qualify for theoretical game analysis." (p.12). After an appropriate literature review, three constructs were established to form the basis for the research; an initial questionnaire was developed and trialled with 226 adults, and the final questionnaire was completed by 615 adults and their results analysed. Statistical methods indicated that the questionnaire had sufficient validity that it can be recommended for use by practitioners with clients as a self-awareness instrument.

Literature Review.

Because readers will be familiar with TA concepts, the following is a summary only of the detailed information that has been contained within the thesis.

Berne (1958) published an article based on an oral presentation he had delivered the previous year, referring to the theoretical bases of TA as structural

analysis, transactional analysis, game analysis and script analysis. Over the years, the concept of psychological games was introduced by Berne in several publications and particularly in his book entitled *Games People Play* (Berne 1964). Published posthumously, his last book (Berne 1972) provided a collation of his ideas, including analysing games using transactional diagrams and Formula G which set out the steps of a game. Karpman (1968) introduced the well-known drama triangle as a way of analysing games in terms of the roles of Persecutor, Rescuer and Victim.

We can consider the general TA literature across three phases: most literature published during the early period of 1965-1977 focused on the identification and naming of games, although many of the games described did not include the switch; for 1980-1989 the number of articles dropped sharply and the authors focused more on the switch within games and concepts related to games; 1990-2019 contained a special issue on games including the article by Zalcman (1990).

We can also see how Berne's other theoretical concepts provide information about games. He wrote of ego states showing up in games in terms of variations of Parent, Adult and Child structurally and how in their functional modes these may be observed as Nurturing or Controlling Parent, and Free or Adapted Child, with the latter subdivided into Compliant or Rebellious (Drye 1974). In terms of transactional analysis, games move from complementary to crossed transactions because there will have been an ulterior, psychological message. In terms of script analysis, the choice of game is seen as done so that the ending reinforces the life plan and one of the psychological life positions (Gujral and Kaur 2018; Massey 1990; Stuntz 1971).

In terms of games, although Berne (1972) used Formula G to indicate that some of the previously

existing names of games were no longer fitting the definition, Zalcman (1990) challenged the inclusion by Berne of the moment of confusion (indicated by X and referred to as the cross-up by Berne). Summerton (2000) also regarded X as representing a recurring and familiar moment (déjà vu). Table 1 contains a summary of how game definitions were developed by Berne (1958, 1964, 1966, 1972), together with Zalcman's (1990) version.

Based on the definitions, it is necessary to define further what is meant by the feelings denoted by the payoff. Within TA literature there are four basic feelings that are described as 'real' feelings: mad (angry), sad, glad (happy) and scared (fear) (Qiu Decai 2000; Kleinewiese 1980; Stewart and Joines 1987/1999, 2012/2017). Individuals learn at an early age that only certain feelings are allowed and they begin to exhibit substitute feelings (English 1971, 1972). For the purposes of this research, it was recognised that sadness relates to something that has happened in the past, anger relates to something in the present, and fear relates to something in the future (Thomson 1983).

Purpose of the Research

The purpose of the research was to develop a credible and valid questionnaire that would provide information about psychological game playing by adults, in a way that would allow them and their transactional analysis practitioners to analyse their communication patterns and consider possible changes that might make these patterns more psychologically healthy.

Subject to the identification of the components of such a psychological game questionnaire, and satisfactory indications of its credibility and validity, specific questions to be answered then were proposed as whether there were differences in participation in

psychological games in terms of genders, ages, educational levels or occupations.

Research Methods

As shown in Figure 1, the research structure focused on theoretical versus practical game analysis.

The main features of psychological games were identified as:

- hidden messages - coming from within the individual from negative Controlling Parent, negative Nurturing Parent, negative Compliant Adapted Child, negative Rebellious Adapted Child.
- role switches – Persecutor to Victim, Victim to Persecutor, Rescuer to Victim, Rescuer to Persecutor.
- repressed emotions – sadness (past), anger (present) and fear (future) in terms of the genuine emotions being repressed at the end of the game; with each of these measured in terms of degrees of severity.

The research process began with a literature review, followed by discussions with a Teaching & Supervising Transactional Analyst (TSTA) and statisticians, so that a pre-test questionnaire was developed. To meet statistical requirements, this had 44 questions that covered the number of topics multiplied by 3-5 (Niu Wenying 2015).

This was tested with at least 200 individuals (Wang Wenke and Wang Zhihong 2010; Wang Junming 1999). Questions were then adjusted and/or deleted based on descriptive statistics and a final version with 33 questions was produced and completed by 615 individuals, which allowed a sample confidence level of 95% with a margin of error of ±4% based on Ministry of Interior data on the parent group.

Date	Definition
Berne (1964)	"An ongoing series of complementary ulterior transactions progressing to a well-defined, predictable outcome." (p.48)
Berne (1966)	"A game is a series of ulterior transactions with a gimmick, leading to a usually well-concealed but well-defined pay-off." (p.227)
Berne (1972)	"Formula G : C(con) + G(gimmick) = R(responds) → S(switch) → X(cross-up) → P(payloads). Whatever fits this formula is a game, and whatever does not fit it is not a game."(p.23)
Zalcman (1990)	"A well-defined series of transactions in which at least one person offers a con and eventually pulls a switch and collects a payoff." (p.12)

Table 1: Psychological Game Definitions

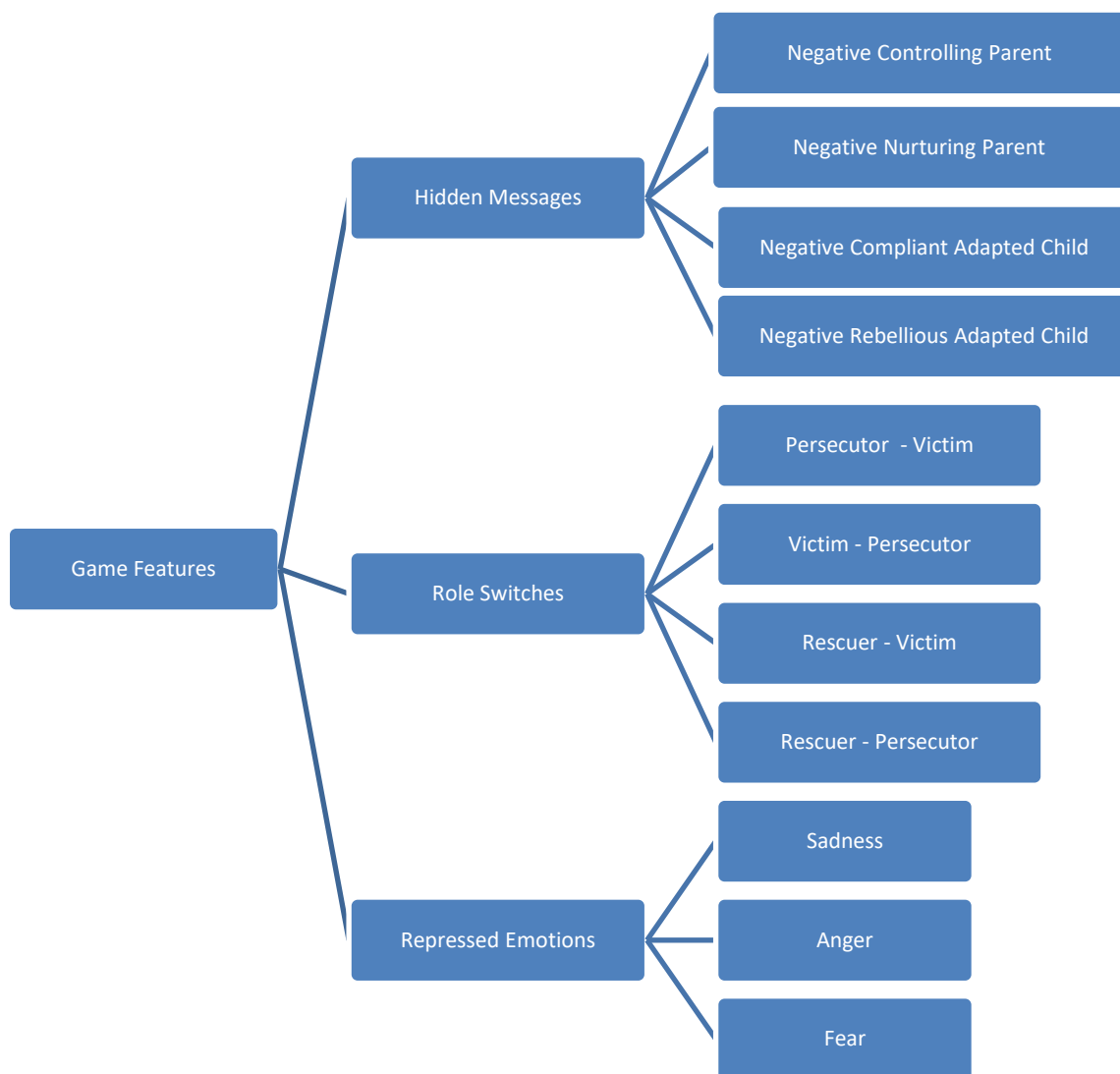


Figure 1: Schema Diagram

Data was collected for the pre-test and the final questionnaire about gender, age, education and occupation variations. Statistical analyses were done using SPSS 25.0 and AMOS 23.0.

To comply with the ethical guidelines (Wu Minglong 2014), the study only collected the subjects' answers to the questions and basic background information and not their identities. The statement about informed consent was included clearly within the questionnaire and subjects were informed that they should read the instructions in detail before going on to answer the questions. The researcher did, of course, guarantee that the results would be based only on the information provided by the subjects

Changes after the Pre-Test

Answers were analysed for any negative interpersonal pattern impact, in line with Zhu Jinfeng's (2010) recommendations about identification of these. It was found that six questions required attention and in the final version, wording was included to subjects that the results of the questionnaire were only for the purposes of their increased self-awareness so they should answer honestly and not be concerned about the opinions of others.

Cronbach's α was used to confirm consistency of direction of each of the three component questionnaires and was 0.918 for the complete questionnaire, 0.723 for Hidden Messages, 0.890 for Role Switches,

and 0.874 for Repressed Emotions. No questions were therefore deleted.

Factor analysis was completed on the three component questionnaires (KMO and Bartlett spherical test) and several questions were deleted or adjusted until a satisfactory statistical result was obtained.

The final version of the questionnaire is included as Appendix A: English and Appendix B: Chinese. Please note, however, that Appendix A is a translation and the statistical results are based on the Chinese version.

Analyses of the Final Questionnaire

Statistical analyses were conducted to check whether the questionnaire better fit the model that the three factors infer common factors or whether the three factors are related to each other, as illustrated in Figure 2. The common factors model met the recommended criteria and the related factors model almost did that with one criterion slightly below. Composite Reliability (CR) was good at $> .60$ and Average Variance Extracted (AVE) was acceptable at $> .30$.

Gender Analysis

The average score for males was slightly higher than for females on the Hidden Messages section, and lower for the Role Switches and Repressed Emotions. However, the average score for adult men was only slightly lower and almost identical to that for adult women. There were also significant differences in the ratio of subjects – there were 155 males and 460 females so caution is advised over interpretation of these results.

Age Analysis

There were 169 subjects who were below 30 years old, 173 aged 30-39, 147 aged 40-49, 114 aged 50-59, and 12 over 60 years of age. There are opposing arguments about whether the final results can be relied upon – homogeneity determination is not attained but Ge Shuren (2006) would say that more confidence is justified considering the heterogeneity of the subjects. Within those caveats, the 0-29 group scored highest on the total scores and on the Hidden Messages component, whereas the 30-39 years group were higher on Role Switches and Repressed Emotions scores.

Education Analysis

The subjects were heavily drawn from university backgrounds, with 316 having attended university,

another 174 having master's degrees and 8 with PhD's. The remainder were 2 individuals who had attended primary school, 2 who had attended junior high school, and 43 who had attended senior high school. Again for these groups there was a problem with homogeneity determination so it has been concluded that there are no significant differences in responses to the questionnaire from groups with the different educational backgrounds.

Occupational Analysis

Occupational categories were combined so that the classifications applied were 50 students, 95 in education, 69 in public services, 105 in the services industry, 24 within finance and insurance, 29 in IT/electronics, 39 in manufacturing, 66 in healthcare, 8 within tourism and transportation, 9 as tradespeople, 31 freelance or retired, 30 in housekeeping, 15 unemployed and 45 in agriculture, fisheries and animal husbandry.

Because of the number of different occupations and the variations in numbers of subjects, caution is required in using the scores of the different groups. However, the total score and those for Hidden Messages and Repressed Emotions are highest in those who are unemployed, with tradespeople slightly higher for Role Switches.

Conclusions

A questionnaire about psychological games has been developed with three components: Hidden Messages (Berne's ulterior transactions); Role Switches (Karpman's drama triangle); and Repressed Emotions (sad, mad, scared as they are usually labelled in the TA literature).

Statistical analyses indicate that the questionnaire is in line with various recommendations so we can now develop TA theory in terms of there being three components associated with psychological game playing, and that it is reasonable to infer that the correlation between those three components exists.

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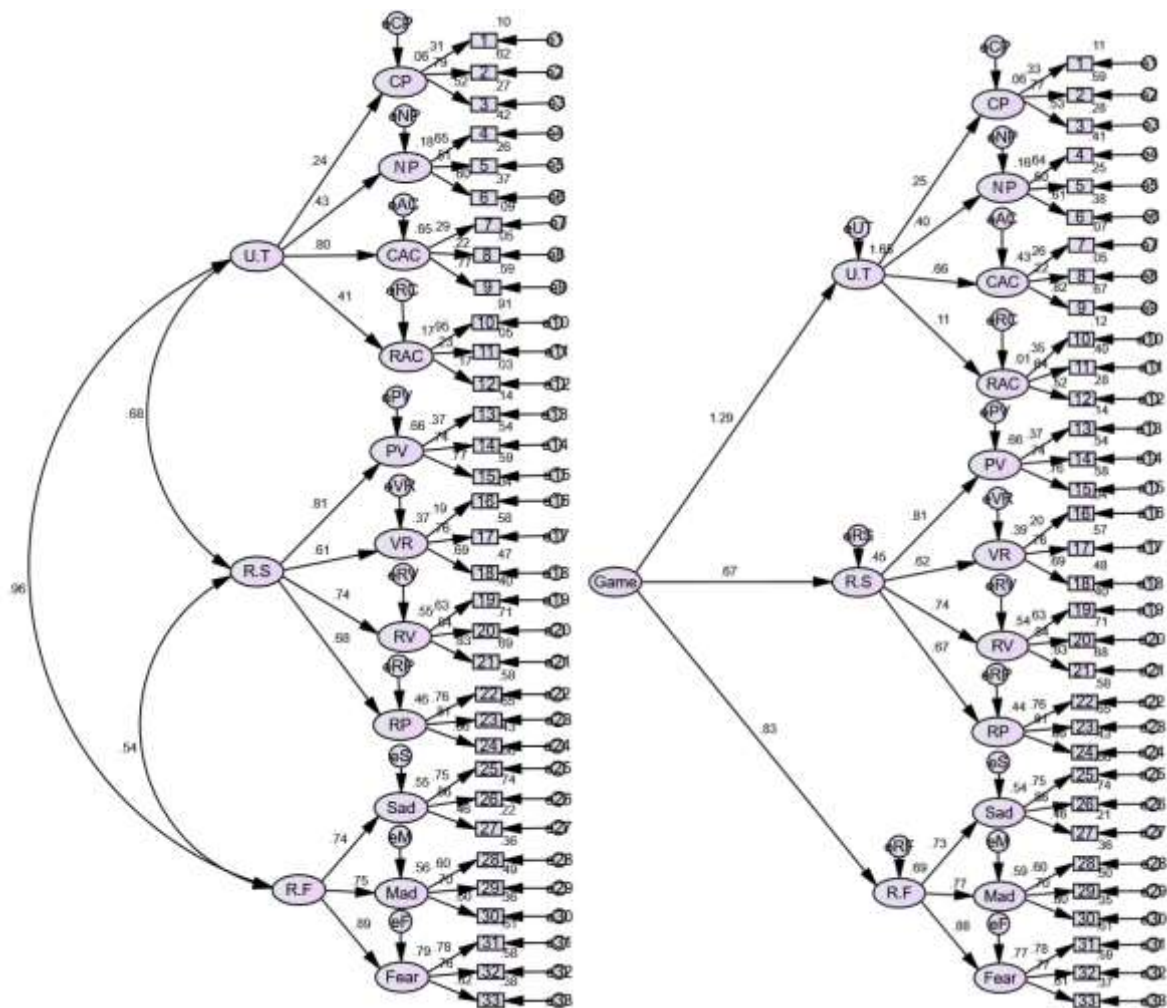


Figure 2: Models of potential relationships.

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Appendix A: Psychological Game Questionnaire (English)

For each question, click on the number that best describes the frequency of your reaction when in the interpersonal interaction described. Never 1 - Always 6		
	Question	Frequency
1	When the other person is late for no reason, I will keep my face blank and wait for them.	1—2—3—4—5—6
2	I will convince the other side to listen to me if I can't agree with the proposal.	1—2—3—4—5—6
3	When I find that there is an omission by another party, I will correct them.	1—2—3—4—5—6
4	In order to get things done quickly, I will step in to help others.	1—2—3—4—5—6
5	I am one call away when the other person needs me.	1—2—3—4—5—6
6	For others' own good, I will take the initiative to help others make decisions.	1—2—3—4—5—6
7	I don't say a word when I'm scolded by another person.	1—2—3—4—5—6
8	Whatever the reason for the quarrel, I'll bow my head and apologize to the other person first.	1—2—3—4—5—6
9	<i>When</i> people question me, I will doubt myself as well.	1—2—3—4—5—6
10	When another person doesn't want to listen to what I think, I become silent.	1—2—3—4—5—6
11	I will ignore another party's unreasonable request to me.	1—2—3—4—5—6
12	Even if another person tries to convince me, I don't change my mind easily.	1—2—3—4—5—6
13	The act of asking for help only when I face difficulty makes the other person misunderstand me.	1—2—3—4—5—6
14	A moment of careless talk leads me into more trouble.	1—2—3—4—5—6
15	I will do anything to prove another person's mistakes, even when it causes problems for me to do that.	1—2—3—4—5—6
16	I find ways to get justice if others criticize me behind my back.	1—2—3—4—5—6
17	When I'm under too much pressure, I vent my anger on others.	1—2—3—4—5—6
18	The grievances I suffer in a relationship will make me argue with the other person.	1—2—3—4—5—6
19	When I am enthusiastic and active, people think I should mind my own business.	1—2—3—4—5—6
20	I get too involved in dealing with other people's problems.	1—2—3—4—5—6
21	When I help other people solve problems I have to clean up what happens afterwards.	1—2—3—4—5—6
22	I listen patiently to others' complaints, but the advice I offer makes them unhappy.	1—2—3—4—5—6
23	I try my best to cheer others up, but it seems they feel more depressed.	1—2—3—4—5—6
24	The way I solve problems leads others think I'm shirking my responsibility.	1—2—3—4—5—6
25	I feel sad when I quarrel with someone because of my own negligence.	1—2—3—4—5—6
26	When I am misunderstood, I feel sad because the other person doesn't believe me.	1—2—3—4—5—6
27	I do things to save face for others and then I feel resentful.	1—2—3—4—5—6
28	Every time I think about what the other person has done to me, I still feel angry.	1—2—3—4—5—6
29	When things don't go as well as expected, I show impatience with others.	1—2—3—4—5—6
30	I get angry when others do things to me that I don't want them to do.	1—2—3—4—5—6
31	I am disturbed if others speak in an aggressive way.	1—2—3—4—5—6
32	Being pushed by others can make me nervous.	1—2—3—4—5—6
33	After a quarrel ends in discord, I am afraid the other side will ignore me.	1—2—3—4—5—6

Appendix B: Psychological Game Questionnaire (Chinese)

第二部分：本量表共33題，每題均有6個選項，請點選最能夠描述您面對人際互動時出現相關反應的頻率。從不1→總是6		
	量表題目	發生頻率圈選
1.	當對方無故遲到時，我會擺起臉孔等對方。	1-2-3-4-5-6
2.	無法認同的提議，我會說服對方聽我的。	1-2-3-4-5-6
3.	發現對方有疏失時，我會糾正對方。	1-2-3-4-5-6
4.	為了讓事情趕緊完成，我會插手幫忙對方。	1-2-3-4-5-6
5.	只要對方有需要，我會隨傳隨到。	1-2-3-4-5-6
6.	為了對方好，我會主動幫對方做決定。	1-2-3-4-5-6
7.	受到對方責備時，我會不發一語。	1-2-3-4-5-6
8.	不管爭吵的原因是什麼，我會先低頭向對方道歉。	1-2-3-4-5-6
9.	當對方對我有什麼質疑時，我也會對自己產生懷疑。	1-2-3-4-5-6
10.	當對方不想聽我的想法時，我會變得沉默不語。	1-2-3-4-5-6
11.	對方對我的無理要求，我會當耳邊風不予理會。	1-2-3-4-5-6
12.	即使對方費盡唇舌想說服我，我也不會輕易改變決定。	1-2-3-4-5-6
13.	我有困難才開口的行為，讓對方對我有誤會。	1-2-3-4-5-6
14.	逞一時的口舌之快，卻讓自己惹上更多麻煩。	1-2-3-4-5-6
15.	想辦法證明對方的錯誤，反讓自己賠了夫人又折兵。	1-2-3-4-5-6
16.	面對他人在我背後造謠，我會找機會還自己公道。	1-2-3-4-5-6
17.	當承受壓力過大時，我會遷怒旁人。	1-2-3-4-5-6
18.	關係中承受的委屈，會讓我跟對方起爭執。	1-2-3-4-5-6
19.	我熱心積極的個性，卻被對方視為干預過多。	1-2-3-4-5-6
20.	處理對方的麻煩事，自己卻成為當事者。	1-2-3-4-5-6
21.	協助對方解決問題，卻變成我要收拾善後。	1-2-3-4-5-6
22.	我耐心地聽對方訴苦，但提供的建議卻讓對方不開心。	1-2-3-4-5-6
23.	我盡力為對方加油打氣，卻反讓對方意志更消沉。	1-2-3-4-5-6
24.	我解決問題的方式，讓對方認為我推卸責任。	1-2-3-4-5-6
25.	和對方因我個人疏失吵架時，我會覺得難過。	1-2-3-4-5-6
26.	在受到誤解時，我會因對方不相信我而覺得傷心。	1-2-3-4-5-6
27.	我會為了顧全對方面子，而讓自己承受委屈。	1-2-3-4-5-6
28.	每每想起對方對我的所作所為，我仍感到憤怒。	1-2-3-4-5-6
29.	當事情不如預期時，我會對他人表現出不耐煩的樣子。	1-2-3-4-5-6
30.	當對方踩到我的地雷時，我會感到生氣。	1-2-3-4-5-6
31.	對方咄咄逼人的說話方式，讓我感到不安。	1-2-3-4-5-6
32.	他人對我的催促，會讓我感到緊張。	1-2-3-4-5-6
33.	吵架不歡而散後，我會怕對方不理我。	1-2-3-4-5-6



Cultural Parent and Learning in the Knowledge Society: A Survey with Students of the Degree in Primary Education

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Some changes have been made so that significant footnotes are now included within the text and references have been added.

Abstract

This article describes a research study involving 132 students on a Primary Education Sciences degree course at Roma Tre University. A complexity paradigm was employed for the research, which used group activities to design a questionnaire that was subsequently analysed to provide 8 different perspectives. The underlying theoretical perspective involved investigation of the applicability of the transactional analysis concept of Cultural Parent (and the associated concepts of Frame of Reference, Script and Ego States) as a way of understanding how changes are needed in educational processes to reflect how family, school and societal cultures have changed, with particular reference to Generation App and the increasing impact of technology on virtual spaces, and the need to reflect cultural diversity.

Introduction

This work was done within a framework of experimentation and research which began from 2011 onwards within several Italian universities. The aim was to define a model that will incorporate elements of transactional analysis in order to understand the didactic processes within primary schools. The learning and teaching process is seen from a perspective that integrates cognitive aspects,

metacognitive dimensions and affective elements, and assumes they can become 'objects' of the teaching activity in order to facilitate the development of self-efficacy and autonomy (in line with key competencies for lifelong learning established by the European Council 2006).

It was increasingly evident that new processes and modalities of social communication were occurring within the external social context of schools, and that these could be related to the characteristics of virtual places (social networks, internet, video games) and to real places (in which complex multicultural and intergenerational communication processes are developed (Prensky 2012)). This means that each of us is immersed in processes of innovation and change and we are therefore invited to revisit frequently our repertoires of personal skills, attitudes and cultural references (Newton, 2015).

Theory Review

Transactional analysis as an educational process was described by the author (Fregola 2011). It was chosen as the reference theory (Montuschi 1993) to be tested against a background of didactic models (Baldacci 2004; Ballanti 1988), learning theories (Olmetti Peja 2015) and competence design models (Castoldi 2011; Scapin and Da Re 2014). Applications of transactional analysis within the educational field have been documented by Emmerton and Newton (2004), who described the journey of educational TA from its beginnings, and by Newton and Barrow (2015), who produced an international guide to theory and practice of educational TA. The research was founded on the assumption that there would be observable affective and relational variables that could be traced back to Bernian constructs, with many possibilities for applying TA from a pedagogical and didactic point of view within schools proposed by Chalvin (1986). This author has also written about the relationships of learning processes and strategic studying (Fregola 2012) and

it was expected that such processes would be influenced by specific skills acquired by the teacher that would improve the teaching-learning process from an educational perspective. We intended to maintain the boundaries between the disciplinary fields relating to the peculiarities of theory and technique.

Cultural Parent, Frame of Reference and Script

The concept of *Cultural Parent* within TA was introduced by Pearl Drego (1983), an Indian Transactional Analyst, incorporating into it the Bernian concept of group culture (Berne 1963). It refers to a metaphor of a place in the mind in which individuals find acceptance within the systems of convictions and beliefs held by their cultural or family groups. Referred to within TA as the group etiquette, this characterises the socio-cultural model that has shaped over time. It occurs alongside the technical aspects, or technical culture, about how the culture produces artefacts, and the group character, which includes the emotional aspects which are manifested within the group. According to Drego, the Cultural Parent is learned directly from parental figures, mainly by modelling.

A *Frame of Reference* is held by each individual (Miglionico 1998), fed by every social group, family, country and city which contribute aspects that unite everyone, although with different intensities and drawing on their individuality in terms of their Cultural Parent. Schiff (1981) defined it as "the structure of associated (conditioned) responses (nerve connections) that organises thoughts, emotions and behaviours in response to specific stimuli... [and provides the individual with] a global perceptive, conceptual, affective and action set that is used to define themselves, others and the world." (p.60-61). The frame of reference therefore represents a filter that determines a large part of the perception and understanding of reality (Stewart and Joines 1990) and the processes of selective attention. It leads to recognition strategies of discrimination and classification, and on other levels to decision processes, problem solving and actions (Gagné 1973).

Berne (1961) described the *Script* as a life plan based on decisions taken in childhood, reinforced by the adult world and by contexts that have been characteristic within the individual's biography. These factors largely determine the emotional, thinking and behavioural responses which can, in turn, be organised into automatic reactions that obviate any self-awareness and precede any assessments of situations in the here-and-now. Within transactional analysis, autonomy (Berne 1961) is regarded as the concept that avoids script-bound reactions. Communication can therefore be more effective when autonomy allows

the individual to express their talents spontaneously and authentically. In this sense it is a process that allows the individual to recover times, spaces, ways of communicating and internal resources that drop from affective intelligence (Montuschi 1987) and promote self-efficacy (Bandura 2000; Olmetti Peja 2007).

The Hypothesis

It is a common hypothesis that educational and didactic activities impact on some affective variables that can influence the teaching-learning process. We can begin from various theories of reference (Visalberghi 1978) to consider experimental pedagogy to be integrated into the theoretical and methodological aspects of general teaching. The purpose of the research described in this article is to experiment with some situations in complex learning environments that will characterise the deductive interaction of digital natives – i.e. those of the Generation APP described by Gardner and Davis (2014) and Olmetti Peja, Fregola and Zona (2015), and their parents. The intention is to study phenomena about unconscious reactions to continuous innovations in a linear and direct manner (Bocci, De Angelis, and Olmetti Peja 2016).

Studying the educational interactions within the knowledge society, with the current generation of digital natives and Generation App, will present new features to explore and study, the opportunity to revisit prejudices rooted in technological innovation, and the relational dynamics between parents and teachers, outside of the automatic reactions that might be generated by script. Within the complexity paradigm (Alberici 1999; Marescotti 2015; Morin 2001, Ceruti 2009), the Cultural Parent can be reinterpreted in terms of the emerging educational needs and educational roles and how these need to be reconciled to the primary purpose of the evolution of knowledge within a framework of culture, social dynamics and the need to maintain ties with culture and tradition (Fregola 2010).

The Research

The procedural plan of the research developed according to the following phases:

1. Sharing and study of the concepts of Cultural Parent, Frame of Reference and Script in a plenary session with students attending the Laboratory of General Education.
2. A survey of beliefs designed to collect useful data for the preparation of the questionnaire. For this, the theme of the Cultural Parent was described and examined in depth, including the link with ego states. Subgroups were formed for brainstorming on that, producing examples that covered typical situations in which the Cultural Parent might be

recognised from the verbal and non-verbal behaviour of parents and grandparents.

3. The investigation began with design and administration of the questionnaire containing three open questions:
 - a. Write a thought and feeling arising from the meaning that you attribute to the term "Cultural Parent".
 - b. Describe the educational characteristics of an effective parent in the current times.
 - c. Describe the educational characteristics you find in your parents.
4. The final stage was the study of the frequency and quality of the statements, defining them and identifying clusters. Replies to the questionnaires were collected and grouped under the categories of group etiquette, technical culture and group character, which allows us to relate them to the Parent, Adult and Child ego states. The comments were also classified in terms of whether they were:
 - a. descriptive definitions – statements that highlight the relationships between the phenomena and the behaviours;
 - b. argumentative definitions – statements that allow us to specify the relationships between phenomena and related behaviour;
 - c. subjective interpretation – statements that highlight prejudices, values, beliefs, priorities, uses and customs;
 - d. expression of feelings/mode – affirmations that highlight emotional and affective aspects;
 - e. 'magical' expectations – requests for attention or actions and behaviours exhibited by a child with little chance of parents responding accordingly.

Results

The research highlighted eight different visions, presented here in ranked order in terms of frequencies.

Vision 1 – the Cultural Parent directs education – the parent has the precise task of educating and raising the child. This task is influenced by its culture of origin. It clearly emerges that the culture has always been the common thread that has linked past generations with the present, and parents are the spokespersons of that culture. Traditions are to be handed down following what the parents were taught, and passed on by the family. Secondly, the parent teaches their child what they themselves have introjected during their own childhood of their own culture – what Berne defines as the Parent ego state containing stereotypes, thoughts,

beliefs, prejudices, knowledge, ideals, values, customs, models of behaviour, rules, norms, prohibitions, beliefs, traditions, practical knowledge, customs, implicit and explicit laws of the culture of the group – these elements will determine the training and education of children.

Vision 2 – in this perspective, the Cultural Parent generates culture. The Cultural Parent is the one who generates culture, imparts teaching, follows the second birth of an individual which is the educational-intellectual birth that separates a human from other animals. A student identified her own Cultural Parent in her grandfather: although he did not bring her into the world, he raised her and instilled in her all the wisdom in her possession and taught her how to constantly add to it.

Vision 3 – the Cultural Parent understands that education is received from the environment outside the family and excludes that received within the family. This perspective is determined by the traditions of a certain personal life context within the culture of a specific group, and is conveyed by the media, by the school, by the people with whom one comes into contact and therefore depends on the personal experiences of each individual. It is represented by rules dictated by companies and various institutions, including schools. This situation can lead to ambivalent feelings: on the one hand, the parent can feel reassured by the support of the whole community in the process of education and growth of the child, and place reliance on the knowledge and experiences of others; on the other hand, the parent may feel frightened by the influence external sources are having on the child and therefore upon the family context, since such sources are not always positive and controllable.

Vision 4 - in this perspective, the Cultural Parent instructs the children and is likely to be very attentive to the need for education and may be competing with the proposed education provided at school and by society.

Vision 5 – the Cultural Parent is a place of multiculturalism in a global world. It is framed in the phenomena of globalisation and multiculturalism and therefore has an attitude of openness and acceptance towards the new, of curiosity towards the difference, and is in search of an open mind. It is therefore available for comparison and cohabitation with people from different cultures and ages.

Vision 6 – the Cultural Parent is the expression of the dynamic relationship that is defined between schools and families. This means that parenting transmits the culture as it exists today and as it is created dynamically and defined between schools and families. Some saw this figure as a Regulatory Parent,

like the ones that were very common in the past, e. g. when it is too attentive to the rules and spheres of control; others saw it as a competent Adult who researches, is guided by an active Free Child, and actively facilitates consideration and comparison between action models and educational schemes.

Vision 7 – the Cultural Parent here has the function of mediating the culture in the host country, so it is associated with the parent who has been forced to emigrate to another country and has been put in a position of confronting themselves with a different culture to that of their origin. The task of this parent is very complex: on the one hand, there is the need to protect the origins and identity, whilst at the same time searching for ways of integration with the community they are entering into.

Vision 8 – the Cultural Parent here has been identified as a parental figure that is fully inserted into the 'culture' of our time, which means that they are educated, scholarly in terms of education, professionally competent, and a person with experience in facing life and its changes. Their relationship with people is oriented to lifelong learning and generation of self-efficacy.

Comments on Student Results

The Cultural Parent can be seen as a learned instance of which many manifestations that complement each other can be observed. From the eight visions emerges the need to revisit the methods that have been used until now to create a secure cultural base on which to develop a valid and well-founded personal identity. Schools and families may not even share the same rules, the same ideals, the same habits and customs, as was the case up until the end of the last century, when the rules taught to children in school did not conflict with those imparted by parents. This favoured the clarity of boundaries between educational functions of school and family, because anyone who disagreed or did not accept them was considered deviant from society.

From the analysis carried out, as many as 83 out of 132 students have explained that their families are less dependent on school education and that they try to offer and integrate their children's education with extracurricular training courses available and based on expectations (e.g. English courses, European computer licence, sports, music, etc.)

It can be said that until a few years ago the Cultural Parent was mostly shared and unanimously known and accepted, at least within the same national territory. Today things have changed and many different Cultural Parents need to co-inhabit. This creates within each family the need for integration between parental figures for intergenerational and intercultural reasons.

Further Considerations

The research has shown that the transformations underway have resulted in the variability of the forms, amplitude and modes of communication which define the relationships within families and schools and influence mutual expectations.

It was also seen that transactional analysis provided a basis for investigation and study. Students were able to break away from their own Cultural Parent in a process that allow them to return to the Adult ego state so that they could think critically and undertake analysis and synthesis in a way that is free from the automatic reactions that are normally the results of the script. This process is defined by Berne as decontamination (which means that the Adult ego state is no longer being 'contaminated' by the Parent and/or Child ego states).

It seems that we need further research to consider a decontamination process associated with the development of educational processes that will reflect the needs of our time.

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