

# THE ROLE OF THE INNER CHILD IN PROCESS OF DECISION MAKING FOR PRODUCT SELECTION

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#### Abstract

This study explores characteristics and role of the inner child in choosing a product to get some product design specifications desirable for inner child and lead to choose the product. Child ego state or inner child is a state of personality that would like to act like a normal child. It is related to memories saved on brain from childhood. In many cases, desired chosen product among products with similar function is the one which responses well to people's feelings by attracting their inner child. In this case study, 30 people 18 years and older, randomly were asked to answer a questionnaire about cell phone selection criteria. Defining each of ego states role rate in choosing a product indicated that inner child has noticeable role in choosing a product. Considering inner child characteristics and issues of emotions and child's first experiences, whatever is remembrance of good experiences from childhood like plays and pleasure, stories and fantasies, and childhood sense of security can serve as design specifications to attract ones inner child to a product in order to select it among the other products.

Keywords: Ego states, Decision making, Product, Industrial design, Emotional design

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Please cite this paper as:

Surnames, Initials: *Title of paper*. In: Proceedings of the 20th International Conference on Engineering Design (ICED15), Vol. nn: Title of Volume, Milan, Italy, 27.-30.07.2015

# **1** INTRODUCTION

The term inner child was introduced by Eric Berne in his social psychological hypothesis called transactional analysis. Based on his theory human being has three ego states simultaneously called: child, parent, and adult, which struggle with one another. The child ego state is part of us which likes to be child and goes back to the recorded feelings of our childhood. The adult ego state is the wise and logic side of our character. And finally, the parent ego state is that traditions and values recorded during the childhood (Berne, 1961).

Everybody decides in accordance with one's inner values system. This values system is selected from above mentioned three ego states. The presence of these three items influences whatever we do in our lives, for instance social behavior, social relations, choices, etc (Dragoi, 2010; Glasser, 1998). According to the studies conducted on psychology of decision making, making decision requires extensive cognitive activities that involve processing stimuli which appear in particular circumstances, recalling previous experience, and estimating probable outcomes of different choices (Krawczyk, 2002). Emotions make process of decision making easy and fast (Martínez-Selva and Sánchez-Navarro, 2009). This is because, for the lack of cognitive resources, people are not able to process all the information about one topic, so they look for something that satisfies them (Zhang, 2009). Don Norman believes that emotions play critical role in our everyday lives and they help us in decision making. The role of emotional aspect of design is more critical than functional aspect of design so that, from the users' view point, more attractive products function better (Norman, 2004). Since the inner child is the emotional part of human being (Harris, 2011), the study of inner child's role in decision making and product selection is crucial. For instance, we choose a product with passion and enthusiasm and we deeply enjoy using it, on the other hand, another product with the same functionality may not create such feeling while we are using it. Identifying dominant ego state in product selection leads to some psychological factors for design specifications. These specifications can be used to design more attractive desirable product for consumers. The product would be selected among different product competitors as a result. The objective of this descriptive and exploratory study is to achieve the key points of product design that attract the attention of costumers' inner child which convinces them to select the product by identifying the characteristics and role of inner child in product selection. To achieve the objective, the main research questions are: Does inner child has significant role in product selection? What are product design specifications which attract customer's inner child?

## 1.1 Roots of transactional analysis theory

In 1951, Dr. Wilder Penfield from McGill University showed when a person forgets a memory the brain still retains it hidden. It also keeps the memory related emotions. These memories and emotions, which are locked with each other, are clear and transparent when they are recalled (Harris, 2011). In 1950, Eric Berne propounded the theory of Transactional Analysis that are presented based on child, parent, and adult ego states and includes thinking, feeling, and behaving interconnected systems (www.itaa-net.org).

Transactional analysis is mostly used in psychotherapy programs. For example, it was used in a psychotherapy program to improve quality and capabilities of future psychologists (Ciucur, 2013b). It also has been used in many studies as an effective approach to improve the relationship between human beings, for example, for analyzing the relation between radiographer and patients (Booth, 2006), improving relation between doctor and patients (Jones and Chawathey, 2014), and relation among Romanian foresters (Dragoi, 2010). Transactional analysis has also been used in many studies to improve personal health. For instance, in one study, by knowing the psychological characteristics of fat patients, and with the help of ego states' features, they succeeded to help patients to lose their weight (Saito et al. 2009). Also Subramanian and Dewaram (2012) used teddy bear, pillow, mirror, childhood photos (that played inner child's role in sessions), as well as paintings and childhood legends to study effects of inner child's therapy on emotional intelligence. In one study, interaction analysis theory was used in Human-Computer Interaction (HCI) field to improve computer learning process. The results showed that, for better relations and learning, teachers should circulate among three ego states depending on every individual's ego states. And the study's result was useful for designing the interaction, user interface, and emotional quality of user experience (Katre, 2005).

## 1.2 Characteristics of ego states

Ego states have three structural modes: child ego state, adult ego state, and parent ego state.

*The parent ego state* (that super ego) is the state of the character that returns to the recorded parent's deeds and behavior during childhood or their psychological substitution. Morality, culture, traditions and values are also part of these records. The parent ego state makes possible the survival and continuity of human being's life and is useful as far as enough information or enough time is not available for adult ego state to decide. Characteristics relate to parent ego state are: control, rigor, do and do not, dogmatic learnt, rules, values, traditions, wants, orders, prejudice, and bias (Berne, 1996; Booth, 2006; Harris, 2011).

*The adult ego state* is the state of the character that thinks, ratiocinates, predicts, and deals with reflection of result and outcome of what is done. In fact, it is the perception of human being of reality, starts with contact with reality, solves problems by reality measurement, and tries to make the best decision about here and now. Characteristics are regarded to the adult ego state of a person are: logic, rationalism, awareness, effectiveness, consideration, unsentimental, and facts gathering. The adult ego state balances between parent ego state and child ego state (Berne, 1996; Booth, 2006; Ciucur, 2013a; Harris, 2011).

*The child ego state* is the state of the character that goes back to the recorded experiences of childhood and the strongest of these experiences was one's emotions. The main need of a child is survival. It means having water, food, and primary touch and stroke. After that stroke as a unit of recognition, attention or responsiveness is important (That is how a person is looked and interpreted.). The inner child, who likes to act childish, is the only creative and innovative factor and offers new solutions based on its instinct. It is present time oriented and likes to satisfy his/her instantaneous needs. The characteristics of free child ego state of all people are fundamental and common. Characteristics are related to the child ego state of a person include: emotions, safety, novelty, curiosity, infancy vision (having first experience), love (love himself/herself first), anger (if his/her needs are not fulfilled) intuitive sense and instinctive sense, tactual sense, creativity, fantasy, happiness and joy, humor, liveliness, fun and joyfulness, playfulness, desire for pleasure, art, optimist, irregularity, spontaneity, passion of life, expressionism, desire for attention, self-centeredness, and normal selfishness (Berne, 1996; Booth, 2006; Harris, 2011).

Comparison of ego states shows that during the decision making, child ego state is pleasure seeker, adult ego state is considerate and responsive to here and now, and the parent ego state is follower of values and traditions. Also, child ego states reliant on intuitive and instinctive emotions, adult is logic and accurate, and parent prejudices. Cooperation of child and adult is mostly successful, even if parent doesn't get what he/she wants. But the best mode is when all three ego states want something (Harris, 2011).

#### 1.3 Design and emotion

Success of a product in marketplace may be determined by its aesthetic appeal, the pleasure it creates, and the satisfaction that it brings to the costumer. Emotions affect human-product interaction (Khalid and Helander, 2006). Researchers studied the role of emotions in the game design process. They find out players are prone to choose games which offer immense pleasure and enjoyment experience (Baharom and Idris, 2014). Color, Shape, material, and texture can create a favorable feeling about a product. Some colors make us feel excited, while others give a feeling of calm and restfulness (Wilson and Challis, 2004). Different shapes with soft corner, round shapes, and the tactual experiences of an object can create different feelings (Sonneveld and Schifferstein, 2008; Willats, 2004). Material and texture can give a person sense of rough and coarse, humidity, and warmth (Zuo et al. 2004). Esslinger, the founder of Frog Design, claims that, even if a design is elegant and functional, it will not have a place in our lives unless it can appeal at a deeper level, to our emotions. Emotional stimulants include: 1- Senses which people use them to discover their world. 2- Fun, it means attributes that make a product amusing, entertaining, and enjoyable. The aim of using such product is playing with it before working with it. 3- Cuteness is the resulting attribute that seems to evoke 'happiness' and the feeling of protection. 4- Familiarity, it means that the user knows how the product works without any instruction (Demirbilek and Sener, 2003).

*Pleasure*: this concept refers to a large variety of psychological states such as emotions, feelings, sentiments and passions. All products that surround us can be a source of pleasure (Desmet And Hekkert, 2002).

*Luxury:* luxury means enjoyment of a rich, comfortable lifestyle and the indulgence of pleasure. People who are looking for credibility and prestige are more interested in these kinds of products (Reinmoeller, 2002).

#### 1.4 First childhood experiences

Pleasant feeling of a product might be hidden during childhood, when most beliefs, values and ideas were formed (Demirbilek and Sener, 2004).

*Tactual experiences:* the first experience of a newborn child is touching, like mama gloves, towels by which being cleaned, the first cloth worn. Once children grow old enough to reach out and touch what surrounds them, their tactual experiences become active to the extent the kid understands the danger of sharp corner. Touching and being touched are integrated into one phenomenon. For example it is not always clear whether children are cuddling the toy or whether the toy is cuddling them. Although tactual experience is very important for esthetic of an object, people are not able to explain it (Sonneveld and Schifferstein, 2008).

*Shopping:* shopping motivation is due to needs. Children's encounter with shops begins when they can walk and can go to supermarkets with their parents. They buy things which can fulfill their immediate needs, like chocolates and sweets. They learn fundamental of logical shopping from their parents, such as price, quality, and the connection between them. Parents evaluate while they want to choose one between two products and children learn from them (Gunter and Furnham, 1998).

*Childhood heroes:* employing heroes and cartoon characters as a constant visual theme in products has many potentials. People are pre-conditioned in their aesthetic preferences starting from their childhood. Childhood memories are effective on product experience and heroes of this period are effective on desirability of the product. Cartoon and comics are interesting for the feeling induce to the child. Also the lines that draw them play an important role in the expression. Because line is a powerful tool for expressing emotions in cartoon characters and comics, three-dimensional products could also use it (Demirbilek and Sener, 2004).

## 2 METHODS

In order to find out the answers of research questions, first, a case study implemented on mobile phone because it has different options in appearance and performance. In this qualitative case study, thirty persons of eighteen years old and over who came to the mobile shopping center were selected randomly. In order to gain fair results, customers were not discussed about role of inner child while negotiating product characteristic. In a questionnaire, they were asked two main questions: first they were asked to mention two most important criteria by which they choose a cell phone, and then they were asked to mention the reasons of each criterion's importance. The answer of the second question identifies that each criterion is related to just one ego state (according to characteristics of each ego state). Some criteria may have more than one reason. For instance, a customer would mention a large screen for watching movie and entertainment, while another one mentions a large screen for texts to be seen better. As a result, a list of selection criteria and 60 reasons of their importance was obtained. Also, a list of ego states' characteristics was obtained by literature review. Since each selection criteria is related to some ego states' characteristics, the dominant ego state which influences each selection criteria was identified. Data analysis by cooperation with an industrial designer and a psychologist identified that each selection criteria, in regard to its importance reason, is related to which ego state (See appendix table A). Although some criterion could have more than one reason and assign to more than one ego states, each criterion with its reason assign to just one ego state. For instance, having a large screen for watching movie and entertainment is related to the child ego state because, emotional stimuli like fun and attractions are the characteristics of child ego state (Berne, 1996; Booth, 2006). But having a large screen for texts to be seen better is related to the adult ego state because, the best response to here and now are the characteristics of adult ego state (Berne, 1996; Booth, 2006). To be noticed that this study was implemented in autumn 2014 and the cell phone selection criteria is based on the technology at this time. In this study characteristics of ego states are independent variables and cell phone selection criteria are dependent variables.

Identifying the role of each ego state in cell phone selection in the second stage, showed which characteristics of ego states were more important in product selection. Then a list of inner child's characteristics in a questionnaire was given to seven industrial designer specialists and asked them to

choose items among the list that can be used in product design. Finally, according to issues of design, emotion and child's first experiences, it was identified how to use these characteristics in product design. And, product design specifications which are appropriate for inner child's characteristics were obtained.

# 2.1 Cell phone selection criteria

One of the most important criteria of cell phone selection is price. In fact, price belongs to parent's criteria, and the proportion between price and other criteria belongs to adult's criteria. As this study is about selection criteria not buying criteria, price was eliminated from the list. Other criteria were put in three categories: appearance, functional, and technological criteria. Among 60 mentioned criteria, 18 criteria were aesthetic, 12 criteria were functional, and 30 criteria were technological.

Among 18 aesthetic criteria, 15 cases were related to child, 2 cases related to parent and just 1 case was related to adult ego state (Table 1). It can be concluded that aesthetic criteria usually belong to child ego state's criteria.

Selection criterion	Reason for criterion's importance	Ego state frequency	C	A	D
General beauty, style, and color beauty	Be desirable	5			
Favorable material and texture	Make good feeling in hand	1			
Unique model, shape or color	Be unique	3			
Appropriate for my character	Be indicative of my good character	1			
Feminine color and shape Ladies should use feminine cell phone		1			
Brand and model	Be in high class	4			
	Be in good quality like other products of that brand	1			
Frame diversity	Make diversity in its appearance in accordance with every taste	2			

Table 1. Appearance criteria of cell phone and it's relation with ego states

Among 12 functional criteria, 6 cases were related to child ego state, and other 6 cases were related to the adult ego state (Table 2). Therefore, it can be deduced that functional criteria for cell phone selection belong to adult and child ego states' criteria, and parent ego state has no influence in this case.

Table 2. Functional criteria of cell phone and it's relation with ego states

Selection criterion	Reason for criterion's importance	Ego state frequency	С	A	Ρ
Small, light, and with compact side equipments	Easy to use and transport	2			
Wieldy handset	Hands are not bothered	2			
Screen size	Texts be seen easily	1			
Screen size	Picture and movie be seen better	2			
Does not slip in hand	Be safe	2			
Structure and frame quality	Not easily broken or effete	2			
Waterproof	Not broken down	1			

Among 30 technological criteria, 16 cases were related to child ego state, 13 cases related to adult ego state, and only 1 case was related to parent ego state (Table 3). So, it can be derived that, technological criteria for cell phone selection, also, from adult and inner child's criteria.

Selection criterion	Reason for criterion's importance	Ego state frequency	С	А	Ρ
User friendly with good interface	Be easy to use	1			
User friendly with good interface	Be favorite to use	1			
Variety and novelty of software	Be useful	4			
auxiliaries Be varied and eye catching		5			
Powerful camera	Take pictures in urgent situation	1			
	Take pictures in delightful moments	2			
Storage capacity	Speed does not fall down	3			
Possibility of installing diverse games	Be entertaining	3			
Strength of music and movie players	Be enjoyable	4			
Not freezing problems	Does not drive me crazy (insecurity)	1			
	Dysfunction occurs	1			
Up to date operating system	Works fast	3			
Personal information security	My privacy is respected 1				

Table 3. Technological criteria of cell phone and it's relation with ego states

It is necessary to mention that in some cases it is not possible to precisely specify to what extent people's selection is affected by child, parent, and adult ego states. For example, appearance criteria are related to art-loving of child ego state in one side, in another side, it is an educational case and can be influenced by adult or parent ego states. However, this study showed that aesthetic criteria belong to art-loving, desire for stroke, and desire for attention in regard to their importance so they identified as inner child's criteria. Figure 1 shows the role of each ego state in appearance, functional, and technological criteria.

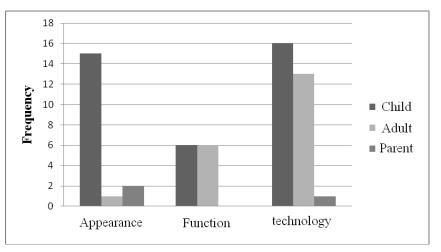


Figure 1. The role of each ego state on appearance, functional, and technological criteria

Generally, among 60 mentioned criteria, 37 cases were related to child ego state, 20 cases related to adult ego state, and 3 cases are related to parent ego state. This way, the role of child ego state in cell phone selection is 62%, adult 32%, and parent 5%. Although all three ego states should confirm the selection of a product, just considering the inner child's desire, we can attract a person toward a product with 62% probability. Figure 1 shows that adult's criteria are mainly related to the product's practical and technological functionality. Adult ego state is the state that balances between child and parent ego state. Meanwhile, when a person wants to select a product between two options which have

similar functionalities, the prominent selection is the one that favors inner child. Therefore, we can consider adult ego state as neutral and conclude by comparison of parent and child's roles in cell phone selection that inner child has significant influence in product selection. Therefore, a design which attracts the inner child can cause the product be selected among many products.

## 2.2 Design specifications

To reach the design specifications that attracts inner child toward the product, characteristics of child ego state that can be applied in product design were identified. Then, based on the literature review in design and emotion, and first childhood experiences, the methods of using these characteristics were identified as basis of design specification.

Characteristics of each ego state were used to identify relation between ego states and selection criteria. The case study of mobile phone showed that some of influential characteristics of child ego state on cell phone selection are: desire for survival and safety, desire for caress and stroke as a unit of recognition (how to be looked and interpreted), art-loving, novelty, innovation, emotions, happiness and joy, desire for attention, desire for fun, pleasure and playfulness. From the industrial designers' point of view, there are some more of inner child's characteristics that can be used in product design which are: creativity, fantasy, irregularity, desire for joking, infancy vision (having first experience), and living for the present time (satisfy the instantaneous needs).

Generally, for inner child's desire for safety, the first necessity in design is heeding of ergonomics and safety rules because of their psychological importance. Then using soft curved shapes, materials, and textures in design creates security and caress feelings because these characteristics remind them the touching of blankets, cloths, and cuddly toys of childhood, and bring up the security feeling of that period. Also, designing new, unique, beautiful, and artistic product can be used to satisfy desires of child ego state like stroke, being seen, and attention. This satisfies not only luxury sense of inner child but also desire for novelty, innovation, art, and creativity. Irregular and childish structure and fonts can be used based on desire for irregularity of inner child. Furthermore, simple, amusing, and play-like mechanisms with joyful colors can be used for desire for plays with toys during childhood. Sweet people and characters can also be used for desire for joking and amusing. Cartoon characters, childhood story heroes or any form that can remind that period can be used to satisfy desire for fantasy because they bring up joy of hearing stories or watching cartoons and childish fantasies. In addition designing consumable products such as foods or cheap disposable material can be used to satisfy instantaneous needs of inner child.

# 3 CONCLUSIONS

In this study, the role of the inner child in process of decision making for product selection is assessed and cell phone selection criteria and the reason of their importance are obtained by a questionnaire. Existence of child, adult, and parent ego states are influential in all daily activities including social interactions and behaviors, decision making and selection. In the present research, in order to identify the role of inner child in product selection, a case study on cell phones is implemented. Data analysis with cooperation of an industrial designer and a psychologist identifies that each cell phone selection criterion, in accordance with its importance, is related to the characteristics of ego states. As a conclusion, industrial designers are asked to choose the characteristics that can be used in industrial design. Dominant aspects of inner child in product selection are obtained by identifying the degree of importance of each characteristic in cell phone selection. The most important characteristics of inner child are desire for survival and safety, touching and caress. According to these characteristics, considering ergonomics and safety rules are the most important design specifications. These feelings of childhood are brought up by designing curved and soft shapes or soft material and texture that remind touching soft cloths and cuddly toys of that period. Although ergonomics and safety rules as a design specification is not very surprising in product design, this study revealed their psychological effects on inner child. The other characteristics of child ego state are desire for stroke and attention, entertainments, joys, and joking. Designing of beautiful and unique products satisfies luxury feeling of the inner child. These attract one's inner child toward a product and encourage him/her to select the product among different products. Therefore, the characteristics of inner child are found out that have more influence on product attraction. Furthermore, inner child has desire for art, fantasy, innovation,

irregularity, and wants to satisfy its instantaneous needs. Designing of new and artistic products can satisfy these feelings of the inner child and desire for art, novelty, innovation, and creativity. Finally, specifications of product design that are proportionate to the characteristics of inner child are obtained which illustrate whatever reminds childhood good experiences, like plays and pleasure as well as sense of safety in childhood, can be used as design specifications. Cartoon characters and childhood heroes and forms that remind these characters and fantasies can be used in design. Using sweet characters or simple play-like mechanisms with joyful color reminds pleasure of play with childhood toys. According to the issues of design and emotions, and first experiences of childhood, the methods of using these characteristics in products design are identified. This case study deals with significant role of child ego state on product selection and introduces some design specifications to attract ones inner child toward a product to select it. Next studies will investigate the degree of satisfaction after long time using of the product that is selected by one's inner child. Since this study focuses only on consumer goods and tangible product characteristic, validity of results for capital goods and intangible product characteristic could be examined in further studies.

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#### APPENDIX

Table A. Assignment of selection criteria to characteristics of ego states

Selection criterion and the reason of its importance	Characteristics of ego states
General beauty, style, and color beauty because it is desirable.	Desire for pleasure and art and emotion of child ego state
Favorable material and texture because it makes good feeling in hand.	Primary touch and stroke, tactual sense and safety of child ego state
Unique model, shape or color because it would be unique.	Desire for attention, desire for art, and novelty of child ego state
Appropriate for my character because it is indicative of my good character.	Do and do not, values, traditions, and orders of parent ego state
Feminine color and shape because ladies should use feminine cell phone.	Do and do not, dogmatic learnt, traditions, and bias of parent ego state
Brand and model because it would be in high class.	Desire for attention and expressionism of child ego state
Brand and model because it would be in good quality like other products of that brand.	Prediction, logic, rationalism, and facts gathering of adult ego state
Frame diversity because it makes diversity in its appearance in accordance with every taste.	Satisfying his/her instantaneous needs, desire for attention, and expressionism of child ego state
Small, light, and with compact side equipments because it would be easy to use and transport.	Solving problems by reality measurement, awareness, and consideration of adult ego state
Wieldy handset because hands wouldn't be bothered.	Primary touch and stroke, survival, and safety of child ego state
Screen size for texts to be seen easily.	Making the best decision about here and now and awareness of adult ego state
Screen size for picture and movie to be seen well.	Desire for pleasure, fun, and joyfulness of child ego state
Does not slip in hand because it would be safe.	Tactual sense and safety of child ego state

Selection criterion and the reason of its importance	Characteristics of ego states
Structure and frame quality because it wouldn't be easily broken or effete.	Prediction, solving problems by reality measurement, awareness, and consideration of adult ego state
Waterproof structure because it wouldn't be broken down.	Prediction, solving problems by reality measurement, awareness, and consideration of adult ego state
User friendly with good interface because it is easy to use.	Making the best decision about here and now and awareness of adult ego state
User friendly with good interface because it is desirable to use.	Satisfying his/her instantaneous needs, emotions, fun, and joyfulness of child ego state
Variety and novelty of software auxiliaries because it is useful.	Prediction, consideration, and facts gathering of adult ego state
Variety and novelty of software auxiliaries because it would be varied and eye catching.	Infancy vision (having first experience), desire for attention, and novelty of child ego state
Powerful camera because it is possible to take pictures in urgent situation.	Prediction, logic, awareness, and effectiveness of adult ego state
Powerful camera because it is possible to take pictures in delightful moments.	Satisfying his/her instantaneous needs, happiness and joy, and spontaneity of child ego state
Storage capacity because speed wouldn't fall down.	Prediction, solving problems by reality measurement, logic, and awareness of adult ego state
Possibility of installing diverse games because they are entertaining.	Desire for pleasure, happiness and joy, fun, and fantasy of child ego state
Strength of music and movie players because they are enjoyable.	Desire for pleasure, art, happiness and joy of child ego state
Not freezing problems because it wouldn't drive me crazy (insecurity).	Survival and safety of child ego state
Not freezing problems because no dysfunction occurs.	Logic, rationalism, awareness, and consideration of adult ego state
Up to date operating system because it would work fast.	Prediction, solving problems by reality measurement, awareness, and facts gathering of adult ego state
Personal information security because my privacy would be respected.	Morality, culture, traditions and values, and control of parent ego state