

## Extra-Uterine Adaptation Theory: A Novel Explanation of Every day human Behavior

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### Abstract

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Philosophers and theologians, for eons, have debated and speculated about the purpose of human life without reaching any conclusive agreement. In his rebuke of such an unproductive endeavor, Sigmund Freud once wrote: "The question of the purpose of human life has been raised countless of times; it has never received a satisfactory answer. . . . . We will therefore turn to the less ambitious question of what men show by their behavior to be the purpose and intension of their lives. What do they demand of life and wish to achieve in it? The answer to this can hardly be in doubt. They strive after happiness; they want to become happy and to remain so." (Freud, 1930) In agreement with this admonition, and very much encouraged by it, I began several years ago to carefully observe and exhaustively document the spontaneous actions and primal behaviors of infants and children—in order to gain better insight into the most basic of human desires and aspirations as they naturally become unveiled—starting from the moment of birth. At the end of that pursuit, contrary to the conclusion reached by Freud, I found that (i)—the major priority and end-goal of man, is more than mere happiness in the hedonic sense; and that (ii)—there are five in-born human hungers without the influence of which, ironically man can neither survive nor thrive at all. In this paper, I present empirical, experiential, and historical evidence to support a proposed — ***Extra-Uterine Adaptation Theory***— which embodies these two findings and offers a novel framework for a much clearer understanding of authentic human priorities, daily preoccupations, and everyday endeavors

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**Key words:** Adaptation, Behavior, Happiness, Wellbeing, Hunger, Theory

### 1. Introduction

From Aristotle, the Greek philosopher to Blaise Pascal, the 17<sup>th</sup> century French mathematician and physicist; to Alexander Pope, the 18<sup>th</sup> century English poet and philosopher; to Sigmund Freud, the 20<sup>th</sup> century Austrian neurologist and psychoanalyst; it has been generally believed and accepted (even by present day psychologists) that all men and women, without exception, seek happiness above all things (**see references 1-5**). The claim has been that forth sole reasons and singular purpose of happiness, humans everywhere do all that they do.

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If understood exactly as it is conveyed, this “doctrine” would imply that all murderers kill just to be happy—whereas there those who may kill for self-defense—and sometimes very reluctantly. We have also been told by historians that the pilgrims, who left England to settle in America, did so “in pursuit of happiness”. If not further explained, the underlying aspirations that actually *inspired* the pursuit are lost to the audience of listeners, students, and mentees—who may go away thinking that happiness is a goal, to be sought after, fought for, or even die for; rather than the inevitable consequence of the right thinking and appropriate engagements. Similar confusions and misleading communication also exist in the academic literature largely because there is simply no consensus standard definition of “happiness” (Gilbert, 2005). As a matter of fact, the above referenced long-standing and very popular “happiness doctrine” has never been tested or empirically proven. There is a need therefore to revisit this very fundamental issue by observing the everyday behavior of men and women in order to determine whether happiness is indeed the sole priority and most pressing preoccupation of man. Such endeavor and its consequent findings may bring improved clarity to the very amorphous subject matter of happiness. The resulting findings may favor and affirm one, or more, or none of the existing happiness theories—for examples: Hedonism Theory—which regards happiness as a matter of raw subjective feelings; Desire Theory—which claims that happiness is a matter of getting what you want; Objective List Theory, Authentic Happiness Theory (Seligman, 2003), and the Wellbeing Theory (Seligman, 2011)—all of which emphasize and link achievements with happiness. Alternatively, such new findings may in fact inspire a new theory.

To properly execute an investigation such as being proposed that asks a very fundamental human question, it will require that we go back to the uterus—from whence *all* humans enter a very complex universe. From that particular vantage point, we can begin with a “clean slate” (which means starting from birth) to meticulously observe the behavior of infants and children in order to find out “what they demand of life and wish to achieve in it”—as Sigmund Freud had suggested.

As a practicing obstetrician who has attended to hundreds (perhaps thousands) of women during labor, I have long been fascinated by the fact that in the midst of the usual jubilation immediately following parturition, there was always a dissenting minority of one—the baby—who comes out **screaming and kicking** (very disagreeably) with no show of gratitude for being “delivered”. I have often wondered what important adaptive functions the primal acts of screaming and kicking could be fulfilling—unrecognized by the rest of us. Factually, it is a well-established finding in obstetrics that human babies prior to birth are generally in a state of *contentment and excellent well-being*.

#### **Foot Note:**

[While in the womb, during the first ten months of life, the human fetus lives comfortably; constantly fed, and surrounded by a warm cushion of amniotic fluid, with adequate supply of essential nutrients and oxygen. Using an ultrasound device, obstetricians can routinely determine the wellbeing of a baby in the womb, on the basis of bio-physical profile (or BPP) assessment—where a BPP score of 10/10 (as generally the case in most pregnancies) is the standard medical evidence of *excellent fetal well-being* (Pandipati and Hobbins, 2008)].

### **The Aim of This Investigation**

The objective of this study is to observe and document what spontaneous actions and primal behaviors infants and children indisputably demonstrate—from the moment of birth, through early childhood, and until about age 5; with the ultimate aim of finding out—based on of their observed behavior—what human infants and children truly seem to want, demand, desire, and pursue.

### **Method and Result**

During a period of five to seven years in aggregate, a master compendium containing everything infants and children frequently do and say was created using multiple sources. These sources included published works on childhood and society (Erikson, 1956), human life cycle (Erikson, 1982), and children's conception of the world (Piaget 1929). Also used as a source was information gathered from in-depth interviews of parents and grandparents who were caring for infants and young children; anecdotal accounts from pediatricians and baby sitters; newspaper stories and magazine articles; as well as the detailed logs kept by trained observers assigned to delivery rooms, hospital nurseries, and classrooms (pre-K and Kindergarten only), playgrounds, public parks, and Sunday schools. All the frequently reported expressions, behaviors, and actions of infants and children were carefully vetted before inclusion in the compendium and those that were deemed not to be truly spontaneous, self-initiated, or primal in nature were excluded. For example, reports of children praying before meals were disregarded since such actions were not truly spontaneous or self-initiated but often primed by parents or other adults.

Following a very thorough review and meticulous classifications of all the entries contained in the compendium, a long list of what seem to be the explicator implicit desires, demands, and pursuits of infants and children was compiled—based on what infants and children did and said in the various settings and situations—at home with family, in the classroom, on the playground, and during Sunday school. The list was then edited in three separate rounds but for the same three reasons each time: first, to reduce the length; second, to improve its precision; and third, to maintain its consistency, by deleting, substituting, and combining several items. At the end, a much shorter finalist of twelve things that infants and children seem to relentlessly desire, demand, and pursue, resulted. These twelve things were—*food, comfort, answers, information, inclusion, acknowledgement, intimacy, companionship, trust, reassurance, continuity, and certainty*. In spite of the subjective nature of this methodology, investigator's bias was very strongly refuted by a zero percent (0.0 %) disagreement amongst five independent (blinded) reviewers who scored all the twelve items as "reflective" or "highly reflective" of the contents of the compendium—as opposed to "somewhat reflective", "not reflective", or "absolutely not reflective" of the compendium. The following are specific examples of how the entries contained in the compendium were actually utilized to carefully infer and accurately determine what infants and children seem to desire, demand, or pursue:

1. As documented in the compendium, every baby, during parturition, comes out of the womb quite startled; and without exceptions, screaming and kicking. It was also remarked in the compendium that the crying and kicking (a truly primal and spontaneous reaction) promptly stop once the babies were wiped-dry, provided warmth, cuddled, and fed—a very plausible suggestion that infants do desire or demand FOOD AND COMFORT.
2. At about 6-8 months of age, as documented in the compendium, babies begin to show a clear preference for one particularly "trusted attendant" (often the mother or a nanny). It was remarked that infants would often cry endlessly until handed over into the intimate arms of the infant's own preferred care giver—suggesting a desire or demand, on the part of infants, for a TRUSTED and preferred COMPANION.
3. As documented in the compendium, children generally ask a lot of questions—apparently because (for them) there is truly so much to learn and to know. "What is that grandma?" is often followed by a "why," then another "why" or "how" or "when."

Even before, they are able to speak and ask questions, babies and infants reveal their curiosity by looking around, pointing to things, or reaching for a rattle placed in front of them. Most conclusively, it is through their verbalized endless queries that young children demonstrate beyond any doubt their very strong “desire to know”—suggesting an in-born hunger for ANSWERS AND INFORMATION.

4. Whether it's time to play or to do chores, the compendium was full of anecdotes showing that children (unless autistic) love to be included. At school they hate “time-outs” and bitterly protest against any forms of involuntary exclusion—as often expressed in the common complaints such as “mom, they won't play with me” or “they won't let me help”. As also very well documented in the compendium, children commonly crave for acknowledgements—as in “daddy, daddy, see how strong I am” or “look, grandpa, I did it all by myself!” because of their strong desire and hunger for INCLUSION AND ACKNOWLEDGEMENT.
5. As evident from multiple entries in the compendium, children seem to love repetitions; and very frequently would request encores—as in “papa, let us do that again, please”—right after the second or even the third ride on a ‘merry-go-round’ at the park; or as in “grandma tell me another story “at the conclusion of one, two, or three previous bedtime stories—same night. It was also remarked in the compendium that a game of “pick-a-boo” with a child could go on forever if the adult participant would only fully cooperate—because children love CONTINUITY. Equally as much, they also like the feeling of CERTAINTY and can be very “unforgiving” when promises are broken—“...but you promised”, they would protest distressingly. In what literally amounts to open solicitations, children (as reported in the compendium) often unabashedly ask—“Am I a good boy, daddy?” “Am I a pretty girl mommy?” or “Will I be strong like you when I grow up?”—all of which suggest children's strong desire for REASSURANCE, love for CONTINUITY, and hunger for CERTAINTY

Interestingly, there was no evidence (in the compendium) of apparent signs of spiritual inclination in infants and children before the age of three. It was commonly found that those children age 3-5, who prayed or spoke about God did so *only* if already primed by adults or older siblings—demonstrating that there is perhaps no *in-born* human hunger for religion or congenital yearn for spirituality—as it is apparently for *food and comfort; inclusion and acknowledgement; trusted and preferred companionship; answers and information; certainty, continuity, and reassurance*. However, it was observed and well documented in the compendium that upon being introduced to religious tenets; children love them and very readily accept the concept of an all-powerful God that can make *anything* possible. At the end of a very thorough and exhaustive one more review of all the available information contained in the compendium, the list of twelve was further edited to produce a final list of ten that conclusively represent what infants and children truly seem to desire, demand, and pursue. In alphabetical order these *ten* things are: acknowledgement, answers, certainty, comfort, continuity, food, inclusion, information, intimacy, and trusted companion. From this list of ten emerged what I have chosen to call *the five domains of human hunger*:

*Domain I* – Hunger for food and comfort

*Domain II* – Hunger for intimacy and trusted companionship

*Domain III* – Hunger for answers and information

*Domain IV* – Hunger for inclusion and acknowledgement

*Domain V* – Hunger for continuity and certainty

All the subjects who participated in this study—the pregnant women that were observed during delivery, the parents and grandparents who were interviewed, and the infants and young children observed in the classrooms or playgrounds, came from multiple communities of varying cultural, ethnic, and socio-economic backgrounds.

All the necessary permissions from institutional review boards including participants' individual consent, were duly obtained; and this investigator has no conflict of interest to report.

## Discussion

Human metamorphosis (or life cycle) begins when a sperm from a male unites with an ovum from a female. The resulting single DIPLOID CELL through the process of repeated cell divisions (or mitosis) becomes a MORULA. Through the process of organogenesis, morale turns into an EMBRYO. Next, the embryo turns into a FETUS, and a mature fetus is simply renamed an INFANT after the process of parturition.

Parturition(or delivery)represents a critical transition point in human metamorphosis where-by a fetus that is essentially content, adequately nourished, and well protected in the comfort of the mother's womb during the first nine or ten months of life, suddenly becomes involuntarily expelled and thrust into a much colder extra-uterine environment. If the fetus (or infant) survives this very critical stage, it eventually matures into an ADOLESCENT following a normal puberty. Finally, the adolescent becomes an ADULT, and the cycle ends when the human adult becomes old, and eventually dies. Throughout the entire human life cycle—from conception till death—parturition is the most consequential of all the events because parturition suddenly thrusts the human infantine to a *strange new world* full of countless challenges.

### The Newborn Infant as a Stranger:

Beginning from the moment of birth until approximately age 5, infants and children are essentially strangers (or newcomers) to the world. Accordingly, they express the same three acute needs that are characteristic priorities of a stranger who is new in town. For examples: (1) Very similar to a stranger's acute need for lodging and boarding, new born infants—first and foremost—similarly express their needs and desires for *food and comfort*; and so they cry and kick until these needs are met. (2)Just as strangers who are new in town would approach the information desk or make an early stop at the visitors' center, infants and children have many questions. and therefore similarly request *answers and information*(3) Finally, analogous to a newcomer's need for a tour guide or a local friend and confidant in the new town, so do infants and children (newcomers to the *extra-uterine* world) similarly identifies one particular person or attendant as a *trusted companion*. In consideration of the needs and desires that they demonstrate, it seems as though following their "abrupt eviction" from the womb at birth, the newborn human infants consequently pursue those "things and conditions "such as—food and comfort, answers and information, trusted companionship, inclusion, and acknowledgement—that are critical for extra-uterine survival and re-establishment of contentment.

### Extrapolation of Findings to Adults:

At first glance, the identified five domains of human hungers seemed uniquely characteristic of infants and children. However, after a second look, it became glaringly evident that these five hungers are equally applicable to adolescents and adults. For examples: (1) Children, in general, dread "time out" just as teenagers and adults are commonly petrified at the suggestion of solitary confinement—because all humans regardless of age, desire INCLUSION and fear isolation. Similarly, children and adults strive for excellence, distinction, and achievements (and sometimes, even embellish) in response to the human hunger for ACKNOWLEDGEMENT.(2) A toddler who wanders away from adult supervision(out of curiosity) into the crowd in fascination, is not very different from a 6-year old asking questions (similarly out of curiosity); or a teenager spending hours surfing the internet on his laptop; or the

bearded astronomer who is scanning the sky with a telescope well past midnight—aloof whom are responding to the human hunger for ANSWERS AND INFORMATION. (3) When a three year old asks, “daddy, do you promise?” and the teenager expresses opposition to a change in the house rules; and woman repeatedly seeks reassurance from her lover; or a grandfather makes firm plans to ensure his legacy in the form of a will; or when the patient asks the doctor for prognosis; and a religious congregation prays for everlasting life, it is the human hunger for CERTAINTY, REASSURANCE, and CONTINUITY that is nudging and urging them all.(4) It is the human hunger for a TRUSTED Companionate work when a 6-month old infant prefers to remain exclusively in mommy’s intimate arms; when the bachelor chooses a bride to marry; and the widow or widower mourns diseased spouse forever.(5) Lastly, babies and infants, teenagers and adults alike, love FOOD AND COMFORT—without which, extra-uterine survival may be impossible. The identified five in-born human hungers apply therefore not only to infants and children but to teenagers and adults as well.

### **Universality and Existential Nature of Hungers:**

Based on the above considerations, the evidences strong that weal/s humans—from birth through early infancy to old age and until death—universally show compelling desires (or HUNGERS) to be *included and acknowledged*; to have at least one *trusted intimate companion*; to have access to *food and comfort*; to seek *answers and information*; and also desire *certainty, continuity, or reassurance*—regardless of culture, language, gender, or geography. It is not unreasonable to infer that these identified five domains of human hungers are in-born (or congenital) since they start to spontaneously unfold immediately after birth and become fully expressed within the first few years of life— independent of parental priming.

From EVOLUTIONARY BIOLOGY standpoint, these five basic hungers obviously have protective functions by serving as *natural prompts* reminding us to seek and take those needed actions without which survival, contentment, or well-being outside the womb (or uterus) would be impossible. Accordingly these five *in-born* hungers persist throughout the human life cycle, and though they may be effectively modulated, partially fulfilled, or mitigated in their respective intensities, they are however never ever completely lost or entirely eliminated. These hungers are therefore not mere optional aspirations but universally endowed, absolutely necessary, compulsory, and permanent— because they are EXISTENTIAL.

### **In-Born Hungers and Human Activities:**

There are only very few things (if any at all) that we do as humans (individually or collectively) which are not influenced by our five in-born hungers. As illustrated on the Extra-Uterine Adaptation (EUA) flow chart below, it is simply as we are urged or nudged by our five in-born human hungers that we respond accordingly by seeking (a) *achievements, personal excellence, and distinctions*; (b) *collaboration, love, marriage, and friendship*; (c) *food, income, shelter, and material comfort*; (d) *knowledge, skills, and education*; (e) *spirituality, divine assistance and religious guidance*—respectively. The origin, historical intent, evolution, and the purpose of many human INSTITUTIONS, such as democratic governance, courts of redress, schools, universities, hospitals, religion and the UN; INDUSTRIES such as news and information industry, sports and entertainment, housing and construction, banking and insurance, farming and agriculture;

INVENTIONS such as airplanes, the printing press, television, computers, and the cell phone; CONCEPTS such as binding arbitration, marriage equality, civil rights; and other continuing human ADVANCEMENTS in scientific research, space exploration, architecture, engineering, and medicine—just to name a few—have all occurred in response to our five in-born human hungers. In reality, our in-born human hungers constitute the inspiration and the driving force behind human civilization.

### **Empirical Evidence:**

There is also empirical evidence to support the proposition that all of our individual daily actions and endeavors (whether wholesome or despicable), are ultimately indeed the consequences, extensions, variations or perversions of our five in-born hungers. One such evidence comes from a survey which was carried out at a busy airport—with the assistance of paid Boy Scout volunteers. In that survey, (many years before 9/11 and current airport security by TSA), travelers waiting for their respective flights to various destinations were individually approached at random by a uniformed boy scout (with paper and pencil in hand) who had been coached to politely ask: “Sir (or Madam), please tell me without any details, for what reasons you are travelling today”. Upon review and careful analysis of all the responses gathered, *without exceptions*, each reason given by travelers had something to do with either fulfilling or reacting tone or more of the five in-born human hungers for personal reasons or on behalf of others. For examples: some travelers were “going on vacation”; others “to visit” someone relevant in their life—“affiance”, a child, parent or in-laws; “for business”; “family re-union”; “going back to school”; “job interview”; “travelling as a church group”; “receiving an award”; “to attend a wedding”; or “going to a seminar”. In another study, sixty-five anonymously submitted “to do lists” were reviewed in order to gain some insight into human preoccupations and daily priorities. The result showed that every “to-do” item (or plans of intended action) on each list was connected—directly or indirectly, causally or consequentially—in some way to one or more of the five in-born human hungers.

### ***The Extra-Uterine Adaptation (EUA) Flow Chart:***

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“THE EXTRA-UTERINE ADAPTATION (EUA) FLOW CHART”

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The EUA flow chart highlights the contrast between life inside the very hospitable uterine (where contentment prevails), with the much more complex world outside the uterus—where there is so much to know and to learn, where food and comfort must be earned, where others are important and sharing is unavoidable, and where an uncertain future permanently looms over every mortal being. The EUA flow chart also illustrate show our five in-born hungers prevail outside the uterus; and in response to which, we as humans do all that we do every day to adapt to *extra-uterine existence*.

### **My Main Thesis and Postulation**

The claim in this paper is not that this author has *discovered* the grand “purpose and intension” of human lives; but that from the observed behaviors and actions documented, we as humans, seem to strive not after mere hedonic happiness but for something more consequential than transient interval of glee or delight — which ‘happiness’ essentially represents even when most exhaustively studied (Lyubomirsky, 2007 and 2013).

Contrary to the “happiness doctrine” man does not do all he does solely and singularly in pursuit of happiness but largely in response to his five in-born hungers which constitute the true inspiration behind all his aspirations—as shown by preponderance of the evidence presented in this paper.

My sister who won a fifty dollar bet was *happy*; whereas my patient who after many years of infertility treatment finally conceived and successfully gave birth to a set of twins (a boy and a girl) was not merely *happy* but *fulfilled*.

The point not to be missed is that these two individual instances of emotional pleasure while similarly positive are not qualitatively equivalent in gravity, impact, and continuing significance on the respective lives of these two “happy” women—given the full extent of in-born human hungers. It is important to note that neither went looking specifically for happiness as a goal whereas both were undoubtedly driven by the weight of their own hungers. At the end each was rewarded proportionately. The next day while the former soon forgets and moves on, the latter will go on to experience a much more profound and prolonged *feeling of fulfillment*—albeit, not necessarily forever as there are still other hungers yet to be fulfilled. Personal CONTENTMENT and WELL-BEING (rather than mere glee and delight) is the human inspirational end-goal— a state of mind that is free of worries with all our needs met or our hungers effectively mitigated—if not completely fulfilled.

At birth after our abrupt removal from the uterus during parturition, every one of us continues indefinitely (consciously and subconsciously) to harbor the inspirational end-goal of ultimately re-capturing that state of contentment and well-being as once experienced in our mother’s womb. If given the opportunity, there are many amongst us who would readily choose to return back to the comfort and worry-free life once enjoyed in the uterus. In fact, it has been observed that during moments of severe deprivations or in times of extreme physical and emotional vulnerability, humans at any age tend to assume the so-called “fetal position”—suggesting an intuitive or subconscious desire to return to that most protective posture previously utilized so effectively *in utero*. Because a successful return to the uterus is not a practical option, alternatively some choose a worse but the more pragmatic option of committing suicide when the stress of *extra-uterine adaptation* proves too difficult. According to the World Health Organization, in 2013, over 800,000 people committed suicide globally. Interestingly, the highest rate recorded in every country or region of the world, occurs among 15-25 year olds—the age range during which individual independence is usually on the rise but *extra-uterine adaptive skills* still quite immature.

## Summary and Conclusion

It is an evidence-based conclusion that everyday life (as we all know it and live it) is essentially an on-going attempt to adapt to *extra-uterine existence*. As a part of this adaptive process, we have overtime become endowed (through evolutionary benefits) with five in-born existential hungers that serve as prompts, designed to continuously nudge, remind, and encourage us to take the necessary actions that are needed to achieve *extra-uterine* survival, contentment, and wellbeing. Very interestingly, the wellbeing theory (Seligman, 2011) when carefully reviewed in light of the five in-born existential human hungers (as delineated in the EUA flow chart) provides a very good argument of how our five in-born human hungers may in fact foster wellbeing through their apparent promotion of *achievements, relationships, engagement, and spiritual alertness*.

Based exclusively on the findings in this paper, the *Extra-Uterine Adaptation Theory* is proposed and offered as an evidence-based novel explanation of *how* and *why* we as humans behave the way we do every day. This theory provides a practical framework for attending to our own personal mental hygiene as well as in an informed planning of holistic counseling for others.

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