



The Psychological Significance of “Touch”: a Concrete Indicator of Man’s Relationality

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Introduction

Jesus’ love touched all people. Literally. The Gospels are replete with illustrations of Jesus’ use of touch to convey healing, forgiveness, compassion, and love.¹ Why touch? Certainly Jesus had the power to heal, forgive, and touch souls without physical contact. That He chose to use this human connection, this power of touch, is not at all surprising. Touch—and the psychological significance of touch—stands out as key indicator of man’s relationality.

¹ One of the most well-known stories in the Gospels highlights the significance of touch in relationships—specifically in Christ’s relationship with the hemorrhaging woman. In Luke 8:43-48, we read:

And a woman who had a flow of blood for twelve years and had spent all her living on physicians and could not be healed by any one, came up behind him, and touched the fringe of his garment; and immediately her flow of blood ceased. And Jesus said, “Who was it that touched me?” When all denied it, Peter said, “Master, the multitudes surround you and press upon you!” But Jesus said, “Some one touched me; for I perceive that power has gone forth from me.” And when the woman saw that she was not hidden, she came trembling, and falling down before him declared in the presence of all the people why she had touched him, and how she had been immediately healed. And he said to her, “Daughter, your faith has made you well; go in peace.” As St. Augustine phrases it in his commentary on the Gospel of St. John: “The crowds press; the woman touches” (“illa tangit, turba premit”) (*In Ioannis Evangelium Tractatus*, Cl. 0278, tract. : 26, par. : 3, linea : 8).

I speak to you today not as a theologian, but as a psychologist. The concepts of God as relational and man as a relational being are important topics of discussion among theologians today ²; my focus as a psychologist, however, will be on empirical data from the sciences demonstrating that man is meant to be relational. He not only needs to be in relationship with others in order to survive and to develop nor-

² Cardinal Ratzinger, in his book, *Introduction to Christianity*, Ignatius Press, San Francisco (1990), states that, “the confession of faith in God as a person necessarily includes the acknowledgement of God as relatedness, as communicability, as fruitfulness. The unrelated, unrelatable, absolutely one could not be person.” (p.128) He goes on to explain that the Trinity “exist(s) on a different level, on that of relation, of the ‘relative.’” (130)

“Being-in himself he is simply God. Person is the pure relation of being related, nothing else. Relationship is not something extra added to the person, as it is with us; it only exists at all as relatedness.”

In another work, (“Retrieving the Tradition: Concerning the notion of person in theology,” *Communio* 17, Fall 1990) Cardinal Ratzinger explains more fully the connection between God as relation and the human person as a relational being:

“In God, person means relation. Relation, being related, is not something superadded to the person, but it is the person itself. In its nature, the person exists only *as* relation...One could thus define the first person as self-donation in fruitful knowledge and love; it is not the one who gives himself, in whom the act of self-donation is found, but it is this self-donation, pure reality of act. (p.444)...[M]an does not posit the reservation of what is merely and properly his own, does not strive to form the substance of the closed self, but enters into pure relativity toward the other and toward God. It is in this way that he truly comes to himself and into the fullness of his own, because he enters into unity with the one to whom he is related.” (445)

“Let us summarize: in God there are three persons—which implies...that persons are relations, pure relatedness. Although this is in the first place only a statement about the Trinity, it is at the same time the fundamental statement about what is at stake in the concept of person. It opens the concept of person into the human spirit and provides its foundation and origin”. (p. 447)

“This is the meaning of Christology from its origin: what is disclosed in Christ, whom faith certainly presents as unique, is not only a speculative exception; what is disclosed in truth is what the riddle of the human person really intends...Christ is not the ontological exception...he is, on the contrary, the fulfillment of the entire human being...then the Christological concept of person is an indication for theology of how person is to be understood as such... “(p.450)

“If the human person is all the more with itself, and is itself, the more it is able to reach beyond itself, the more it is with the other, then the person is all the more itself the more it is with the wholly other, with God. (450-1) In other words, the spirit comes to itself in the other, it becomes completely itself the more it is with the other, with God. ...relativity toward the other constitutes the human person. The human person is the event or being of relativity. The more the person’s relativity aims totally and directly at its final goal, at transcendence, the more the person is itself.” (451)

mally, he actually becomes himself most fully through his relationships with others.

"Relationality" means, *inter alia*, that we are not created in isolation but, on the contrary, that we are called to be in relationship with others from the first moment of our existence. And this relationship is not an abstract idea of relatedness but a very concrete one. From conception, the unborn child—though a distinct person—is in the closest physical contact possible with another human being: literally inside his mother. As John Paul II noted, "On the human level, can there be any other '*communion*' comparable to that *between a mother and a child* whom she has carried in her womb and then brought to birth?"³ From conception through birth and infancy, a child's close physical contact with his mother reveals much about the nature of touch.

The Nature of Touch

Touch develops early. In fact one of the earliest sensory systems to develop in the human embryo is the somesthetic system—related to touch.⁴ The nerve pathways in the skin develop first, followed by those related to movement, balance, hearing, and vision.⁵ "[T]here is increasing evidence to indicate that the fetus experiences touch in utero,"⁶ as unborn children as young as 13 ½ weeks move in response to stimuli in the uterine wall. Further, the parts of the brain necessary for self-awareness "are formed by twenty-eight to thirty-two weeks gestation... Thus intrauterine tactile experiences may provide the rudimentary foundations for perception of boundaries between one's own body and that of another."⁷ The unborn child, then, begins to interpret the meaning of touch in a very basic way.

Moreover, once the infant is born, touch continues to shape his perceptions and brain development. As one group of researchers

³ John Paul II, *Letter to Families*, no. 7 (1994).

⁴ Stack, D., "The Salience of Touch and Physical Contact During Infancy: Unraveling Some of the Mysteries of the Somesthetic Sense," *Blackwell Handbook of Infant Development*, ed by Gavin Bremner and Alan Fogel, Blackwell Publishers (2001), p. 352.

⁵ Weiss, S.J., "Parental Touching: Correlates of a Child's Body Concept and Body Sentiment," *Touch: The Foundation of Experience*, Kathryn E. Barnard and T. Berry Brazelton, eds., International Universities Press, Inc., Conn. (1990), p. 427.

⁶ Weiss, p. 426.

⁷ Weiss, p. 426.

noted, “Many features of the infant’s environment help to shape neurobehavioral development; however, tactile experience may play an early and significant role. Receptors and neural pathways associated with touch are the first to develop in infancy and the baby’s primary stimulation is through the touch received in care...As a result, touch is central to development of the brain’s ‘hardwiring’ during this initial period.”⁸

Touch “serves a multitude of purposes, ranging from maintaining an infant’s state, to increasing weight gain and caloric intake in pre-term infants, to providing comfort and warmth, to providing a means of social communication, to adjusting posture, to serving an important means of developing the early parent-infant relationship...”⁹ Most significantly, for our purposes, touch becomes the gateway to an infant’s experience of relationships themselves—particularly with his mother. “Mother-infant interactions imply a process of synchronous and bidirectional influence, where skills are transmitted, which promote learning experiences...The quality of these interactions varies depending on the mothers’ emotional states...through touch, mothers and infants can exchange perceptions, thoughts and feelings, which promote emotional and non-emotional or informative communication.”¹⁰ In other words, touch plays an essential role in the mother – child relationship.

One researcher expressed the connection between touch and man’s relationality in this way: “Touch is inherently relational. The act of tickling is a good example...it is not possible to tickle oneself. The laughter evoked by tickling appears to depend entirely on the social situation... Similarly, to experience hugging demands a partner...Each of these examples makes clear the relational aspect” of touch.¹¹

⁸ Weiss, S., Wildon, P., St. John Seed, M., & Paul S., “Early Tactile Experience of Low Birth Weight Children: Links to Later Mental Health and Social Adaptation,” *Infant and Child Development*, vol. 10: 93-115, at p. 94.

⁹ Stack D., “The Salience of Touch and Physical Contact During Infancy: Unraveling Some of the Mysteries of the Somesthetic Sense,” *Blackwell Handbook of Infant Development*, edited by Gavin Bremner and Alan Fogel, Blackwell Publishers (2001), p. 368.

¹⁰ Herrera, E., Reissland, N., Shephard, J., “Maternal touch and Maternal Child-directed speech: effects of depressed mood in the postnatal period.” *Journal of Affective Disorders* 81 (2004) 29-39, p. 29-30.

¹¹ Stack, p. 369.

The Power of Touch: Infant Survival Depends on Human Contact

While touch has always been a natural part of human relationships, its significance was long underestimated. As modern society became better at safeguarding human life and health, especially through technology and medical innovation, it initially overlooked the relational needs of the whole person. The consequences of such a one-sided view of the human person were disastrous.

Studies over the past 50 years have demonstrated that simply providing for an infant’s physical needs is inadequate: it fails even to ensure his survival. Human touch—and all that it implies— is essential for survival. In the early 20th century, scientists observed the impact of institutional care on infants, both in Europe and in the United States. Though the institutions were sanitary and provided the food, care, and shelter infants needed, a huge percentage (31.7 - 75%) of the infants in the institutions studied died within the first year of life.¹² These figures supported anecdotal reports from medical doctors in several cities during the same time period. For example, the mortality rate for infants in Baltimore institutions was estimated at over 90% during the first year of life; Albany reported one institution with an estimated death rate of nearly 100%.¹³ These poor survival rates were not simply a function of inadequate medical care or neglect. Rather, they were the products of little or no interaction—not even basic physical touch— with caring human beings. In particular, the absence of the mother or a loving substitute left the infant’s emotional and developmental needs unmet. As a result, those infants were more prone to sickness and death and, as later studies showed, to psychological disturbances.

As a starting point, this early research on the value of touch points to an essential truth: the human person is a unity of body and soul. In addition to basic physical needs that must be met, he has emotional needs that can be met only in the context of relationship.

Lack of Touch (and by Implication, Relationship) Impairs Infant Development

Touch is significant not only in ensuring survival but also for a child’s proper development. When caring, loving touch, offered in the

¹² Spitz, “Hospitalism”, p. 53.

¹³ Spitz, p. 53.

context of a relationship is absent, infants develop poorly. Studies in the 1930's in Europe noted that even as death rates among institutionalized children dropped due to better hygiene and medical care, the rate of severe psychiatric illnesses soared. "Institutionalized children practically without exception developed subsequent psychiatric disturbances and became asocial, delinquent, feeble-minded, psychotic, or problem children."¹⁴

In short, institutionalization destroyed the very lives it meant to protect. The explanation was twofold: First, in institutional settings children were deprived of stimulation in an effort to sterilize the surroundings and make them germ-free. Yet even with hygienic environments, the infants in institutional care showed decreased resistance to illness and limited ability to regain health after illness. Second, the absence of the child's mother had a tremendously negative effect. "Stimulation by the mother will always be more intensive than even that of the best trained nursery personnel... Those institutions in which the mothers were present had better results than those where only trained child nurses were employed."¹⁵ The mother's absence contributed to severe psychological damage, not just because mothers are better at providing stimulation but because a mother's touch frames the contours of a loving, human relationship.

A long-term, comprehensive study (the "Spitz study") undertaken during the mid-century honed in on the reasons why institutionalized children suffered psychiatric problems and developmental delays: the lack of human contact. It compared the developmental outcomes for infants in two different institutions with each other and with children in home environments. The Spitz study noted crucial differences between the two institutions—and very different results. The first institution was a foundling home which, while antiseptically clean, offered little stimulation and little contact with a mother or mother-substitute after the infant was weaned. The other institution, a home for delinquent girls and their infants, generally allowed the mothers to remain an active presence in their infant's lives, or provided a mother-substitute for the infant. The children in the girls' home, while generally less gifted from birth, showed a steady developmental rate. The children in the foundling home began at a higher level developmentally but "spectacularly deteriorated,"¹⁶ most notably after they were

¹⁴ Spitz, p. 54.

¹⁵ Spitz, p. 55.

¹⁶ Spitz, p. 59.

weaned. This developmental deterioration occurred even though the "nurses[at the Foundling home were]...unusually motherly, baby-loving women; but...the babies of Foundling Home nevertheless lack all human contact for most of the day [due to a ratio of one nurse to at least seven infants]." ¹⁷

In contrast, the home for delinquent girls, although an institutional setting, required the children's mothers or a consistent substitute to provide baby care. Interestingly, the degree of depression and disturbance suffered by the infants who were separated from their mothers depended upon whether the natural mother was loving and whether the "substitute love object" was a good one or not. In those cases where the natural mother was not loving, separation from her did no harm as long as a good substitute was provided. When "the mother substitute was a good one, depression [did] not develop... [D]epression is much more frequent and much more severe in the cases of good mother-child relationship. In bad mother-child relationship not a single severe depression occurs. It seems that any substitute is at least as good as the real mother in these cases." ¹⁸

The benefit to the children who were with their mothers was expressed this way by the Spitz study: "The interchange between mother and child is loaded with emotional factors and it is in this interchange that the child learns to play...In these emotional relations with the mother the child is introduced to learning and later to imitation. We have previously mentioned that the motherless children in the Foundling Home are unable to speak, to feed themselves, or to acquire habits of cleanliness: it is the security provided by the mother in the field of locomotion, the emotional bait offered by the mother calling to her child, that teaches him to walk. When this is lacking, even children two to three years cannot walk." ¹⁹

In general terms, the comparison between institutions revealed how essential it is for the infant to have a continuing, warm relationship with his mother—or a loving substitute. Whereas the home for delinquent girls "provides each child with a mother to the nth degree, a mother who gives the child everything a good mother does and... eve-

¹⁷ Spitz, p. 64.

¹⁸ Spitz, R.A., "Anaclitic Depression: An Inquiry into the Genesis of Psychiatric Conditions in Early Childhood," *Psychoanalytic Study of the Child*, Yale University Press, vol. 2 (1946), at p. 335-336.

¹⁹ Spitz, p. 68.

rything else she has. Foundling Home does not give the child a mother, nor even a substitute mother, but only an eighth of a nurse.”²⁰

A second study by Spitz noted that children who had been in the full-time care of their mothers, but who were then unavoidably separated from them (at ages 6 to 11 months) for a period of months responded with severe depression marked by weeping, withdrawal, and disconnect from their surroundings and others.²¹ The infants regressed developmentally as well. In every case, however, when the relationship with the mother was restored, the depression evaporated and the child’s developmental measures (which had fallen during the time of separation) jumped. Within just twelve hours after the mothers’ return, the children scored up to 36.6 percent higher on developmental indices.²²

More recent research has validated the Spitz conclusions: infants deprived of touch in the pivotal first year of life manifest serious emotional pathology. One recent study noted that children raised in institutions for the first three years of life suffered an impaired ability to establish deep relationships. “These children developed an ‘isolation type of personality characterized by unsocial behavior, hostile aggression, lack of patterns for giving and receiving affection, inability to understand and accept limitations, much insecurity in adapting to environment.”²³

Another study yielded similar results: “The life histories tend to confirm the ...conclusion that infant deprivation results in a basic defect of total personality. This defect manifests itself in the spheres of intellect and feeling ...suggesting that the institution child’s personality is congealed at a level of extreme immaturity.”²⁴ The lack of loving touch in an infant’s first years creates a lasting legacy of impaired relationships. “From the start there is the dual problem of meeting his need for love and of molding his impulses and drives in accord with social requirements. His appetite for affection is insatiable and there is no appreciable development of the capacity for identifying with and loving others... The institution child ...establishes no specific identi-

²⁰ Spitz, p. 65.

²¹. Spitz,, R.A., “Anaclitic Depression,” *Psychoanalytic Study of the Child*, Yale University Press, vol. 2 (1946).

²² Spitz, Anaclitic, p. 330.

²³.Goldfarb, W., p. 19.

²⁴ Goldfarb, W., “Psychological Privation in Infancy and Subsequent Adjustment”, *American Journal of Orthopsychiatry*, vol .15 (1945), p. 252.

fication and engages in no meaningful reciprocal relationships with other people.”²⁵ Ignoring the child’s need for touch, for human relationships, in effect treats him as a material being and damages his very humanity.

Healthy Development Requires Touch in the Context of Relationships

Not all studies focus on negative results for touch-deprived infants. Touch correlates with normal development because, as body-persons, we naturally relate to other human beings in a bodily way, not an abstract or theoretical way. More recent studies highlight the necessity of touch for optimal development; additional research also delineates the kinds and frequencies of touch which make a difference in a child’s life.

One reason why touch is so essential to proper development is because it provides a vehicle for stimulation. Early studies that aimed to understand the nature and significance of touch relied on data from studies with rhesus monkeys: “Harlow’s classic work with rhesus monkeys substantiated the importance of tactile stimulation by demonstrating that contact was more important than reducing the feeding drive for the development of social attachment.”²⁶ In other words, monkeys developed a preference for a soft object over one that offered food but not comforting contact. The studies of institutional care also support the view that lack of touch, and the resulting lack of stimulation, were primary causes of the infants’ slow development. Other researchers, however, argued that “the lack of intimate relationships is the factor responsible for institutionalized children’s problems.”²⁷

In reality, the two factors are related. Touch provides stimulation, but touch also conveys meaning—meaning that grows out of the relationship between two people. An expanding field of research not only underscores the infant’s need for human contact in order to develop properly, but also sheds light on the emotional value of touch in the context of relationships. Let’s look at the developmental aspects first.

Every parent who has dealt with a newborn knows instinctively that holding, rocking, and caressing a fussy infant soothes him. Recent

²⁵ Goldfarb, 253-254.

²⁶ Stack, p. 352.

²⁷ Stack, p. 353.

research supports this parental intuition: touch reduces crying, promotes healthy weight gain and consistent feeding.²⁸ Several studies of failure to thrive syndrome and other feeding disorders indicate that touch not only facilitates proper feeding but also is essential for human growth. “[C]hildren with FD’s [feeding disorders] may indeed be suffering from touch deprivation. Three forms of maternal touch were reduced in FD: affectionate touch, a form of touch that is unique to parents and promotes cognitive development....proprioceptive touch, which supports physical growth; and unintentional touch, an indicator of the free-floating closeness between mother and child. ...”²⁹

Intuitively, the solution to feeding and growth problems would seem to be related to eating patterns and food choices. However, scientists have discovered that many feeding disorders can be improved more effectively by focusing on the touch patterns and overall relationship between mother and child.

Maladaptive early development expresses the distress of the non-verbal infant that is not contained by the mother-child relationship. The combination of the global reduction in maternal sensitivity and the restriction of physical closeness may place children with FD’s at higher risk of optimal development....interventions focusing on maternal sensitivity were more beneficial than feeding – focused behavioral therapy, suggesting that targeting specific relational patterns is useful.³⁰

The research on feeding disorders indicates that the most basic aspect of our survival–nourishment –needs to be integrated with loving human touch in order to produce its optimal effect.

Studies of pre-term infants shed further light on the value of touch. Because they are born early, pre-term infants are deprived of valuable in utero contact with the mother. Even in the womb, the unborn child benefits from physical contact with the mother, as studies reveal a “strong relationship between maternal sleep stages and intra-

²⁸ Stack, p. 354 and 364.

²⁹ Feldman, R., Keren, M., Gross-Rozval O., and Tyano, S., “Mother-Child Touch Patterns in Infant Feeding Disorders: Relations to Maternal, Child, and Environmental Factors,” *J. American Academy of Child Adolescent Psychiatry*, 43:9 (Sept. 2004), 1089-1097, at 1095.

³⁰ Feldman, p. 1096.

terine fetal activity.”³¹ One theory of why premature infants have such a difficult time regulating temperature and breathing is that they “are deprived of the regulatory influences of maternal biological rhythms.”³² Touch, however, is an effective intervention for these vulnerable infants. “Body contact has been stressed as a most fundamentally important form of stimulation for early development.”³³ Touch therapy, as well as specially-designed waterbeds designed to simulate human contact, successfully compensate for the missing maternal contact, resulting in fewer instances of apnea (interrupted breathing) in these infants. ³⁴ In addition, touch reduces the level of stress hormone found in preterm infants. Researchers measured the level of cortisol (a stress-related hormone) in the saliva of newborn preemies. Those infants who spent 20 minutes in skin-to-skin contact with their mothers reduced their cortisol levels significantly.³⁵ Close physical contact soothed the babies and resulted in a decreased stress response. For full-term infants, touch interventions produced improved health benefits as well, affecting “metabolism, intestinal motility and glandular, biochemical, and muscular changes.”³⁶

Touch and Emotional Development

But the power of touch goes beyond the physical benefits: it is necessary for emotional development as well. “The socialization of human newborns and their parents, that first relationship, begins early, even in the womb. Beyond its survival value, contact and affection between mother/ father and infant are likely to serve the infant’s developing social and emotional needs.” ³⁷ Most parents naturally touch their newborns in wonder and awe. Several studies confirm that “parents’ first contacts with their newborns reveal the use of touch as inte-

³¹ Korner, A., “The Many Faces of Touch”, *Touch: The Foundation of Experience*, Kathryn E. Barnard and T. Berry Brazelton, eds., International Universities Press (1990), p. 281.

³² Korner, A., p. 281.

³³ Korner, A., p. 273.

³⁴ Korner, A., 291.

³⁵ Gitau, R., Modi, N., Gianakoulopoulos, X., Bond, C., & Glover, V., “Acute Effects of Maternal skin-to-skin contact and massage on saliva cortisol in preterm babies.” *Journal of Reproductive and Infant Psychology*, vol. 20, No. 2 2002. at p. 87.

³⁶ Weiss, p. 428.

³⁷ Stack, p. 355.

gral and seemingly central to those first communications.”³⁸ Daily routines of touching enhance bonding between parents and infant so that “positive effects may be observed on the whole family system, rather than solely impacting on the infant.”³⁹

But the quality of touch matters—*what* the touch conveys is as important as the touch itself. One noted researcher, Sandra Weiss, classified touch according to duration, location, intensity, and sensation.⁴⁰ She noted that, “Diverse qualities of touch may be viewed as symbols in a language of touch, just as word symbols create a verbal and written language for communication and shared meaning.”⁴¹

Another researcher pinpointed the two ways that touch conveys meaning: “First, touch may transmit the caregiver’s perceptions, thoughts, and /or feelings to the infant....[or] the caregiver’s touch may influence that infant’s perceptions, thoughts, feelings, or behaviors.”⁴² Touch is “capable of communicating and eliciting positive emotions...as well as modulating negative ones.”⁴³ The emotions accompanying the touch, experienced simultaneously, add to its meaning. “[P]ain, disgust, fear, or tension, in contrast to feelings of closeness, comfort, relaxation, or yielding which take place during a particular touch, give the tactile act further meaning as it is carried to the CNS [central nervous system].”⁴⁴ The kinds of touch experienced by the infant affect his emotions and his subsequent attachment to the caregiver or parent.

“Attachment theorists have long regarded the quality of parent-infant physical touch as a central feature of the responsive and available care-giving environment that is necessary to foster an infant’s sense of security.”⁴⁵ Meaningful touch between the mother (or mother-substitute) and child helps strengthen the child’s attachment to his mother, which in turn creates a secure child. Attachment research highlights

³⁸ Stack, p. 356.

³⁹ Stack, p. 357.

⁴⁰ Weiss, 430-432.

⁴¹ Weiss, p. 430.

⁴² Hertenstein, M., “Touch: Its Communicative Functions in Infancy,” *Human Development*, vol. 45 (2002), p. 72.

⁴³ Hertenstein, p. 75-76.

⁴⁴ Weiss, p. 430.

⁴⁵ Hertenstein, p. 79.

the importance of mothers’ and infants’ sensitivity to each others’ behavior, and the role of touch in behavioral regulation. Sensitivity and responsiveness have direct links to attachment, relationship quality and future interactions....Contact behaviors have been found to be integral features of emotional communication between mothers and infants and higher levels of touch are related to secure positive attachment... Maternal sensitivity, considered a key contributor to synchronous and mutually reciprocal interactions, has been recently related to optimal patterns of attachment....The characteristics of maternal sensitivity and responsiveness often involves physical closeness and physical touching behaviors.⁴⁶

But what kind of touch is best? And what exactly does it communicate? Researchers are honing on that information as well. Touch conveys emotions, and “the type of touch conveys particular emotions. Emotions (feeling states or messages) that might be communicated through touch include: love and caring, sympathy, empathy, anger, and sense of security...”⁴⁷ Most mothers instinctively know the “special importance of caressing and comforting skin contact between parent and child in fostering a sense of being valued.”⁴⁸ Science confirms this experiential knowledge. “Tender, gentle holding and touching have been identified as central to a child’s secure attachment and emotional security..., serving as the primary means through which support and tenderness are communicated pre-linguistically. In particular, caressing and close holding seems to indicate special nurturance and intimacy...In addition to the emotional security fostered by nurturing touch, it has been proposed that an infant’s later ability to feel and express empathy and caring towards others depends to a great extent, on that infant’s earliest tactile experience and whether s/he was touched in a caring way....”⁴⁹

The type of touch and the message it communicates from mother to child have a tremendous impact. When the mother (or caregiver) recoils from contact or engages in harsh or non-nurturing touch, the infant shows emotional deficits. For example, when caregivers reject

⁴⁶ Stack, p. 363 In addition, if the mother is feeling more affectionate, she tends to express affection more frequently. Conversely, “Positive touch stimulation has been shown to enhance positive affect and attention in infants of depressed mothers.” Stack, p. 364. Depressed moms touched their infants more but in “intrusive “ and “overstimulatory” ways. Stack, p. 364.

⁴⁷ Stack, p. 362.

⁴⁸ Weiss, S.,et al, “Early Tactile Experience,” at p. 96.

⁴⁹ Weiss, S.,et al, “Early Tactile Experience,” at p. 96.

physical contact, “especially ventral –central contact, with their infants,”⁵⁰ less secure attachment results.

Maternal Depression Affects Touch Patterns and Relationships

Similarly, the characteristic touch patterns between depressed mothers and their children correlate with poor outcomes for children and for the mother-child relationship itself. Not surprisingly, mothers who suffer from depression interact with and touch their children differently from non-depressed mothers.⁵¹ The quality of touch from depressed mothers becomes more negative, and the meaning the child derives from it propels him towards greater distress or even depression himself. Put differently, depressed mothers tend to engage in touch that elicits more negative emotions from infants.⁵² In fact, researchers have found that “the more depressed the mothers, the less they included affective and informational features in their speech, and the less they touched their infants directly...”⁵³ Moreover, “infants who had received harsher and more frequent touch demonstrated more ag-

⁵⁰ Hertenstein, p. 80.

⁵¹ “Mothers of 6 - 10-month-old infants, with depressed mood, in comparison with non-depressed mothers, differed in the quality and frequency of touch directed to their infants.” I Herrera, E., Reissland, N., Shephard, J., “Maternal touch and maternal. Child-directed speech: effects of depressed mood in the postnatal period.” *Journal of Affective Disorders* 81 (2004) 29-39, at p. 34.

⁵² Hertenstein, p. 77.

⁵³ Herrera, E., Reissland, N., Shephard, J., “Maternal touch and maternal. Child-directed speech: effects of depressed mood in the postnatal period.” *Journal of Affective Disorders* 81 (2004) 29-39, at p.35. The authors go on to explain the relationships between touch, speech, and depression: “Previous studies have reported that mothers who are clinically depressed tend to show negative affect (anger, sadness), negative touch (rough pulling, tickling, poking), as well as unresponsive behavior during face-to-face interactions with their infants....Additionally, higher frequencies of touch have been found among mothers with symptoms of depression, indicating over-stimulating behavior in their use of touch when interacting with their infants....[Some researchers] have suggested that maternal sensitivity seems to interact with frequency of touch to define its effects. Thus a more sensitive mother would use touch to attend to her infant’s developmental cues and emotional states, while less sensitive mothers may touch their infants without attending to their demands, leading to more negative consequences on the infant’s sense of security and attachment. Mothers with depressed mood may not be responding to incremental demands from their babies as they grow older, which could explain the relative lack of tactile stimulation directed at younger babies and over-stimulation directed at older babies. Because maternal touch conveys specific messages, its quality appears to be affected by depressed mood. Thus, depressed mothers may be transmitting through touch negative emotions or states without realizing it.”

gressive and destructive behaviors while infants who had received more nurturing touch had significantly less depression and anxiety."⁵⁴ These results hold true over the long term as well as the short term.⁵⁵

Maternal depression can trigger negative results for the child in addition to the mother's own suffering. The relationship between a depressed mother and her child exhibits signs of being "out-of-sync," which produces greater stress as the infant strives to regulate and manage her experiences with little help from her non-responsive mother.⁵⁶

[I]f mothers are depressed, they are not able to respond contingently to their infants' behaviors. This results in negative emotional states, which infants have to resolve by the use of self-regulatory behaviors. This process then produces poorly coordinated interactions. In contrast, well-regulated states translate into synchronous and accurate behavioral exchanges between mothers and their infants.⁵⁷

Because maternal postnatal depression can trigger negative results for the child,⁵⁸ in addition to the mother, medicine recently has adopted a more aggressive stance in identifying and treating depression and in counteracting its effects on the child. Aside from direct interventions aimed at the mother, such as medicine or therapy, the most effective remedy for the child relies on positive touch. A concentrated effort to increase the frequency of positive touch can "compensate for the lack of verbal and facial emotional communication by depressed mothers with their infants..."⁵⁹ The power of touch can overcome

⁵⁴ Hertenstein, p. 77.

⁵⁵ Hertenstein, p. 77

⁵⁶ *Ibid.*, at p. 31; "Self-directed and other-directed behaviors are expressed emotionally in the face,

speech, voice, gesture and posture. During the first year of life, these various channels are not well coordinated, and infants, in order to face all disruptions, require an additional regulatory capacity, which has to be provided by their mothers. Mothers have to read and respond to their infants' behaviors accurately in order for this system to work well."

⁵⁷ *Ibid.*, at p. 31.

⁵⁸ Postnatal depression has been associated with reduced quality of mother-child interaction and increased risk of behavioural disturbance, and impaired cognitive, social, and emotional development in their offspring. *Ibid.*, at p. 31.

⁵⁹ *Ibid.*

even some of the negative effects caused by maternal depression⁶⁰—thus improving the emotional states and the long-term relationships of both mothers and children. Thus intervention through touch therapy may ameliorate some of the worst effects of maternal depression on the child. Further study in this area may yield important results in treating depressed mothers and their offspring.

Touch Contributes to the Child's Sense of Self (Self-Perception)

In addition to affecting the physical and emotional aspects of child development, touch affects the child's inner concept of himself and his own self-worth. The human person becomes himself most fully through his relationships with others. We know this as a theological truth, but science also testifies that on the most basic level, the

⁶⁰ See Martha Pelaez-Nogueras, Tiffany M. Field, Ziarat Hossain, Jeffrey Pickens, "Depressed Mothers' Touching Increases Infants' Positive Affect and Attention in Still-Face Interactions", *Child Development*, vol 67, 1996, p. 1780-1792. This article highlights the effects of depression and the positive effects of touch in countering the impact of maternal depression. The paper reported on a series of experiments (the "still-face") designed to mimic the effects of depression: the mother's face is devoid of emotion or reaction while she interacts with her infant. When touch is added to the mother-child encounter, even with the still-face, the child shows a more positive response. This is what the authors report:

"[T]ouch can reinforce and maintain high rates of infant eye contact responses, vocalization, and smiles during face-to-face interactions...infants' attention and positive affect can be reinforced and maintained by an adult providing *contingent* tactile stimulation during face-to-face interactions." [At p. 1782.] "During the still-face situation the continuation of maternal gaze toward the infant, coupled with her lack of responding and lack of touch, may lead to an infant reacting with negative affect and other coping behaviors. Stack and Muir (1990) found that when mothers were asked to be facially unresponsive, silent, and not to touch their infants during the still-face episode, infants displayed more grimacing and less smiling compared to periods of normal interaction. However, when touch was introduced during the still-face period, infants' positive affect and attention was higher...."

The studies drew several conclusions: "[I]nfants of depressed mothers responded more positively to the reinstatement of touch following a still-face-no-touch episode than did infants of non-depressed mothers. Infants of depressed mothers showed more positive affect (more smiles and vocalizations) and gazed more at their mothers' hands during the still-face-with-touch period than the infants of non-depressed mothers, who grimaced, cried, and gazed away from their mothers' face more often during this period. ...the distress caused by maternal lack of facial expressions and voice was reduced by instructing mothers to actively touch their infants. These findings suggest that the effects caused by the still-face (lack of emotional expressions) can be partially eliminated (or reduced) by mothers actively touching their infants while still facially and verbally unresponsive." At p. 1788.

child's concept of himself as a person is shaped through his relationships with others. Specifically, how others touch him affects his perception of himself, his body and his sexuality. From birth onward, "body experiences are the primary means for relationship with others....[One study] has indicated that if a human infant is not given the handling necessary for integrating early undifferentiated bodily sensations, the effect could be a basic distortion of lack of perceptual integration of the body image."⁶¹

While this is a newer area of study, and warrants further research, preliminary results suggest that a child's self-perception is dependent, in part, on parental touch.

Under normal conditions, parents are the most significant people in the development of the child's body image, for the interaction with parents imparts an indelible impression on the child...From the initial tactile interaction with mother to those with father, children's perceptions of their bodies as meaningful objects begin to form....parents endure as those individuals whose touching offers the most available, consistent, and influential source of qualitative information...The body image develops against a background of differences in the qualities present in these tactile interactions between the child and the parents, an image that becomes integrated over time into a personal frame of reference for the child.⁶²

A child's awareness of his own body, in turn, affects his larger sense of self. "A person's entire developing sense of self, although not limited to sensations generated by the body, appears to be rooted in body awareness, body functions, and body activities...This assumption is supported by studies which show a significant correlation between one's feelings and perceptions regarding the body and one's concept of the total self."⁶³

⁶¹ Weiss, p. 427-8.

⁶² Weiss, p. 434. Weiss' study yielded interesting but preliminary results showing different effects of parental touch on boys and girls. Father-touch tended to be more instrumental, while mother-touch tended to be more nurturing. More research is needed in this area to study the effects of touch from each parent on the different sexes.

⁶³ Weiss, p. 425 Weiss notes elsewhere that the experiences of pain and pleasure also shape the body image: Studies have shown "that painful tactile stimuli (discomfort sensations) distort the body image by preventing adequate functioning of the body's perceptual system. Additionally...[another researcher] indicates that pleasurable tactile interaction (the comfort quality of sensation) allows for maximal discrimination, providing vital information for development of a positive and stable cathexis of one's body as a worthwhile and valuable part of self." Weiss, p. 433-4.

In other words, the touches a child receives, particularly from his parents, shape not only his basic perceptions of his body, but also his perception of physical integrity itself and ultimately the meaning he attributes to his body. Those touches provide him both data and an interpretive context for the data. They help him begin to intuit who he is. In short, a child's sense of how he is touched contributes directly to his emerging sense of relationality and personhood.

The existence of a relationship and the nature of this relationship with the mother or parent are the cornerstone of developing identifications. They color the child's grasp of himself, his relation to people outside of the primary family group, his relation to the material world of things, his mode of solution of problems that may arise to meet him, his level of conceptualization, and probably even his simplest perceptions.⁶⁴

Of course, a child's sense of who he is—and even who he can become—depends in a concrete way on his relationships and on what those relationships convey to him about himself. Noted psychologist John Bowlby states: “If, for instance, a child is loved and valued, that child will come to view himself or herself as lovable and valued.”⁶⁵ This in turn affects how a child perceives God. “Beliefs about what God is like (e.g., loving and caring vs. controlling and wrathful) appear to correlate with mental models of the self, suggesting that people who see themselves as worthy of being loved and cared for are likely to view God as loving and caring.”⁶⁶

In its fullest sense, man's relationality becomes the framework for communicating meaning—significance, acceptance, and love—from one person to another. In the process, the parent's message of love or lack of love (communicated in part through the quality of touch) enables or cripples the child as he begins to make sense of his existence, to understand himself and the meaning of his own life. He gives and

⁶⁴ Goldfarb, W., Effects of Psychological Deprivation in Infancy and Subsequent Stimulation, *American Journal of Psychiatry*, vol. 102 (1945), p. 18.

⁶⁵ Cassidy, J. “The Nature of the Child's Ties”, Cassidy, J. & Shaver, P.R. (Eds.) (1999). *Handbook of Attachment: Theory, Research and Clinical Applications*, New York, N.Y.: Guilford Press, p. 6.

⁶⁶ Ch. 35 “Attachment and Religious Representations and Behavior”, p. 811 in *Handbook of Attachment: Theory, Research, and Clinical Applications*, edited by Jude Cassidy and Phillip R. Shaver, The Guilford Press, N.Y., London (1999).

receives love and in turn is shaped by love.⁶⁷ And it is only in a love relationship that he discovers his true value and meaning. As John Paul II reminded us in *Redemptor Hominis*, “Man remains a being incomprehensible to himself without love.” He might have said a child remains incomprehensible to himself without touch.⁶⁸

The reality is that we are already in relationship with God because we are created by Him and sustained by Him. Continuing contact with Him as the source of love is essential for our growth as human persons; in the same way, the love that is communicated by touch is essential to normal human development. The relationship (initially between mother and child) that exists from the moment of conception sustains and supports our essential human development. More importantly, it helps us to know ourselves. In giving the gift of self, through

⁶⁷ The child’s experience of touch, relationships, and his resulting view of himself will affect not only his own life, but the lives of those whom he loves. For his capacity to give and receive love inevitably grows out of those earliest relationships. “[C]hildren’s capacity for intimacy develops within the reciprocal regulation of closeness in the mother-infant relationship...Specific forms of maternal touch, such as affectionate, unintentional, or negative touch, correlated with similar touch patterns of the child. Thus children growing in the context of nonrestricted, loving [physical closeness] appear to give more touch to their caregivers, a tendency likely to be internalized and transferred to significant others throughout life.” Ruth Feldman, Miri Keren, Orna Gross-Rozval, and Sam Tyano, “Mother-Child Touch Patterns in Infant Feeding Disorders: Relations to Maternal, Child, and Environmental Factors,” *Journal of American Academy of Child Adolescent Psychiatry*, 43:9 (Sept. 2004), 1089-1097, at 1095-6.

⁶⁸ Love occurs in the context of self-giving relationships, especially the family. In his encyclical *Fides et Ratio*, Sept. 14, 1998, John Paul II pointed out that man obtains knowledge about his world and about what is true through reason and experience, but also through trust and through our relationships with others (particularly family relationships). He emphasizes that

Human beings are not made to live alone. They are born into a family and in a family they grow...From birth, therefore, they are immersed in traditions which give them not only a language and a cultural formation but also a range of truths in which they can believe almost instinctively...there are in the life of a human being many more truths which are simply believed than truths which are acquired by way of personal verification...This means that the human being—the one who seeks the truth—is also *the one who lives by belief*. [31] In believing, we entrust ourselves to the knowledge acquired by other people...belief is often humanly richer than mere evidence, because it involves an interpersonal relationship and brings into play not only a person’s capacity to know but also the deeper capacity to entrust oneself to others, to enter into a relationship with them which is intimate and enduring. It should be stressed that the truths sought in this interpersonal relationship are not primarily empirical or philosophical. Rather what is sought is *the truth of the person*—what the person is and what the person reveals from deep within. Human perfection, then consists not simply in acquiring an abstract knowledge of the truth, but in a dynamic relationship of faithful self-giving with others. It is in this faithful self-giving that a person finds a fullness of certainty and security. [32]

loving touch, the mother helps her infant to discover his significance: the fact that he is loved and created for love.

In the *Letter to Women*,⁶⁹ John Paul II notes that the mother's joy—her smile— is “God's own smile upon the newborn child.” In the same way, a mother's touches are God's own touches. It is the touch, first, of creation as the mother's touch participates in the unfolding of the child's sense of his divinely created personhood. And it is the touch of love—ultimately, the love of Jesus.

Summary: *This review of psychological literature situates current theories about early development within a theological understanding of man as inherently relational. The sensation of touch is seen to be key for healthy human development, primarily within the mother-infant relationship. Comparative studies of institutional procedures for infants conclude those who experienced meaningful interaction with caring human beings became significantly healthier, physically and psychologically. Research on infant feeding disorders, pre-term infants and on monkeys is cited to illustrate the value of touch to physical development. Research on new-borns appears to indicate that touch can carry emotional significance, not only quantitatively but according to location, intensity and sensation. Touch is a channel of communication filled with meaning, conveying and modulating perceptions, thoughts and feelings. The effects of maternal depression are considered in relation to touch therapy; and briefly, body image is examined in relation to the effect of types and sources of touch in early development.*

Key words: Psychology, Touch, Therapy, Relational, Mother, Child, Family, Development, Infancy, Orphanage, Depression, Relationship, Person, Emotional Development, Social, Attachment, Maternal, Touch Therapy, Socialization, Disorder, Psychiatry, Self, Body, Sexuality, Body Image, Post-natal depression.

Parole chiave: psicologia, terapia, madre, bambino, famiglia, sviluppo, infanzia, orfanotrofio, depressione, relazione, persona, sviluppo emotivo, sociale, affetto, materno, terapia, socializzazione, disturbo, psichiatria, sé, corpo, sessualità, immagine del corpo, depressione *post partum*.

⁶⁹ John Paul II, *Letter to Women*, (June 29, 1995), no. 2