Honors Thesis Proposal

For

Inter-Generational Impact of Parent-Infant Bonding on Resiliency in Pregnant Women

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Introduction

For decades, researchers have been trying to discover the psychosocial factors that shape an individual’s level of resilience, a protective mechanism that provides humans with the ability to cope under stress (Folkman & Lazarus, 1984). The benefits of resilient coping are numerous. It is linked to a more positive affect, self-esteem, socialization, language fluency, better school performance, and health in infants and adolescents (Svanberg, 1998). Studies also show that successful coping is a keystone to productive aging (Gooding, Hurst, Johnson, & Tarrier, 2012).

Resiliency a foundational element associated with survival. Evidence shows that a baseline for coping and resilience is actually developed in the mammalian brain during first year of life (Kaffman & Meaney, 2007). In a study by Kaffman and Meaney (2007), primates and rats were used to determine factors that give rise to this infantile basis of coping. It was discovered that mother-infant bonding through touch in the first year of life launches a specific sequence of DNA methylation, which is central to normal physical and psychological development (Kaffman & Meaney, 2007). These and other animal studies lead researchers to believe that parent-infant touch is responsible for a similar coping framework in the human brain (Gunnar & Quevedo, 2007).

Gentle touch is a positive form of tactile stimulation that plays a significant role in human interaction and the process of bonding. It is often used to increase relaxation and decrease pain (Moyse, 2005). Studies show that parent-infant bonding through positive touch elicits a parasympathetic response in babies. Cuddled infants have a marked decrease in blood pressure,
increased depth of breathing, and increased digestion. The opposite, sympathetic response, is elicited by abused and neglected infants through increased heart rate, shallow breathing, and slower digestion (Benjamin, Werner, & Chellos, 2009). Increased caregiver attentiveness and bonding promotes the level of attachment necessary to cope resiliently (Svanberg, 1998).

John Bowlby, who developed the Attachment Theory, defines attachment as a fundamental and instinctual desire that begins at birth to form strong connections between certain individuals (1988). In his Attachment Theory, Bowlby defined four modifiable systems believed to determine infantile levels of attachment. These four systems, known as the Attachment, the Exploratory, the Affiliative, and the Fear/Wariness Systems increase an infants’ awareness of the world around him or her. Bowlby’s theory proposes that triggering these systems through infant bonding within the first three years of life promotes secure parent-infant attachment (Boris, Aoki, & Zeanah, 1999).

In an effort to find relationships between touch, attachment, and resiliency, Anisfield, Casper, Nozyce, and Cunningham (1990) studied the effects of kangaroo care (KC) on infantile attachment. KC is a form of bonding touch in which a parent maintains closeness by carrying his or her baby across the chest in a sling. Research showed a notable difference in the attachment levels of infants carried in slings as opposed to those carried in infant seats. In addition, parents who practiced KC were more attuned to their infant’s needs than those who touched their baby less frequently. As determined by home observations and parent self-report questionnaires, KC babies were more securely attached by the end of the first year of life than babies whose parents did not practice KC (Anisfield, Casper, Nozyce, & Cunningham, 1990).
Even in light of the abundance of research supporting parent-infant bonding, many still give credence to the idea that touch does not promote infantile resilience. For instance, the director of The Center for Pediatric Sleep Disorders, Richard Ferber, still advises parents to practice less hands-on techniques, like letting the infant “cry-it-out” instead of holding the baby close and cuddling them to sleep. (1987). This parenting style developed from a 1940’s finding that some newborns are “hypersensitive to touch,” meaning that they actually elicit a stress response to physical stimulation. When this hypersensitivity phenomenon was discovered, even orphanages stopped utilizing touch in care of their infants (O’Brien & Lynch, 2011).

A study by Spitz (1945) found that infants residing in such orphanages failed to thrive and died prematurely, even though their physiological needs were being met. In the study, surviving infants were placed into orphanages that utilized tactile stimulation. The infants were given the same amount of nutrition, yet the new feelings of safety and attachment that resulted from therapeutic properties of touch enabled them to gain weight and develop more successfully psychologically and physiologically (Spitz). The study illustrates that denying infants secure attachment through touch directly affects their ability to survive.

In addition to increased health risks and poor coping skills, insecure attachment in infancy can also lead to decreased self-esteem and trust issues. Thus, researchers believe that the negative results of insecure attachment in infancy may cause psychosocial issues experienced early on to be exacerbated in adulthood (Svanberg, 1998).

Problem

Psychological stress results from negative life events. Stress and inadequate coping abilities have been found to interact with one another in a vicious cycle (Folkman & Lazarus,
The inability to cope causes increased stress while stress increases the negativity of life events, making it even harder to cope resiliently (Karademas, Karamvakalis, & Zarogiannos, 2009). Unfortunately, our ability to cope and this vicious cycle is set at an early age, making it very difficult to break the cycle later in life (Gunnar & Quevedo, 2007). Further research is needed to more clearly define the lasting effects insecure attachment and/or lack of attachment in infancy has on coping and resiliency in adulthood.

Purpose

From the wealth of information available, most researchers conclude that increased attention and touch in infancy promotes better resiliency in adulthood. However, research has failed to uncover a precise correlation between the two. The purpose of this research study is to learn more about the lasting effects that different levels of parent-infant bonding have on resiliency in pregnant women.

Specific parenting practices may be identified in this study that correlate with higher or lower levels of resiliency. Results may lead to recommendations on optimal parenting practices with infants that increase attachment and lead to improved resiliency in adults. Findings may also lead to further areas of study.

Methods

A cross-sectional descriptive correlational study design will be utilized. The subjects will be a set of two or three people including a pregnant woman and her mother and/or father. The study will be conducted at Winnie Palmer Hospital for Women and Babies. Subjects will include adult (18 year old or older) pregnant women in the early stages of labor or antepartum (but
hospitalized), and considered to be in stable condition by their healthcare provider. They must be able to speak and read English and be accompanied by at least one parent.

After recruitment and consent, parents will complete demographic information and a questionnaire developed by the student and research mentor. This questionnaire will focus on parenting techniques that the pregnant woman’s mother and/or father can remember utilizing while raising his or her daughter during the first year of life.

The pregnant woman will complete demographic information and the Resilience Scale. The Resilience Scale has been used extensively in many research studies. It has been used to test resiliency of many different ethnicities and demographics, ages ranging from 16-103, including European Americans, African Americans, Hispanic-Latinos, American Indians, adolescent mothers, Irish immigrants, homeless adolescents, military wives, as well as young, middle-aged, and older adults. The Resilience Scale is reliable (Cronbach’s Alpha = 0.84-0.94) with adults. When used to measure depression, morale, life satisfaction, and perceived stress, the scale proved to be valid by coinciding with researchers’ hypotheses regarding these factors’ positive or negative relationships with resiliency 100% of the time (Wagnild, 2009).

An overall resiliency score will be calculated for the pregnant women and answers from the parent’s questionnaire will be coded and correlated with scores from the Resiliency Scale. Statistical analysis may include associations and possibly predictions between parenting behaviors of pregnant women’s parents and current coping by the pregnant individual. Demographic information may also be analyzed in association with parent questionnaire answers and pregnant women Resiliency Scale scores.
References


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Bibliography


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