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A Review of The Risks and Benefits of Cosleeping

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A Review of The Risks and Benefits of Cosleeping

Abstract

“Cosleeping” is defined as a child sleeping in the same bed as an adult within arm’s reach. The literature on cosleeping identifies a number of risks and benefits to infants, but many questions remain unanswered. Proponents of cosleeping assert that the research supports the benefits of cosleeping. Proponents report reduced rates of Sudden Infant Death Syndrome (SIDS), increased rates of breastfeeding, the instinctive nature of cosleeping. Opponents of cosleeping generally report opposite findings and theories: cosleeping increases the rates of SIDS and leaves children at risk of suffocation, entrapment, overlaying, and rebreathing carbon dioxide. A large portion of the literature reported relates to cosleeping differences across cultures. Additionally, the thesis reports the limited long-term or retrospective studies that have been conducted have not found lasting positive or negative effects of cosleeping. Examining this question further can provide us with additional insight into this controversial issue. This thesis carefully and fully examines the research that has been completed regarding cosleeping and offers suggestions for future research.

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A REVIEW OF THE RISKS AND BENEFITS OF COSLEEPING

A THESIS

SUBMITTED TO THE FACULTY

OF THE

SCHOOL OF PROFESSIONAL PSYCHOLOGY

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Abstract

“Cosleeping” is defined as a child sleeping in the same bed as an adult within arm’s reach. The literature on cosleeping identifies a number of risks and benefits to infants, but many questions remain unanswered. Proponents of cosleeping assert that the research supports the benefits of cosleeping. Proponents report reduced rates of Sudden Infant Death Syndrome (SIDS), increased rates of breastfeeding, the instinctive nature of cosleeping. Opponents of cosleeping generally report opposite findings and theories: cosleeping increases the rates of SIDS and leaves children at risk of suffocation, entrapment, overlaying, and rebreathing carbon dioxide. A large portion of the literature reported relates to cosleeping differences across cultures. Additionally, the thesis reports the limited long-term or retrospective studies that have been conducted have not found lasting positive or negative effects of cosleeping. Examining this question further can provide us with additional insight into this controversial issue. This thesis carefully and fully examines the research that has been completed regarding cosleeping and offers suggestions for future research.

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A Review of the Risks and Benefits of Cosleeping

The research on cosleeping offers compelling and diverse findings. Often these findings contradict one another and occasionally they are based on poor methodology. The authors involved tend to write with passion, as this topic is controversial and important for the well-being of future generations of children. If cosleeping is the most common format of sleeping across the world, why are there some nations who strongly oppose it? According to Owens (2002), “cosleeping with parents is a controversial topic that has not been thoroughly explored in the literature” (p. 254). The existing research points to the potential benefits, as well as dangers, of cosleeping. Much of the literature reports varied and contradictory findings, leaving the public confused on this very important issue. Cosleeping has been explained in theoretical literature as beneficial to the child’s well-being while also being potentially lethal (Willinger et al., 2003). It may be a matter of weighing both sides of the argument and deciding what form of sleeping is most nonmaleficent. This thesis will aide in this debate by offering a review of the literature and discussing topics that have not yet been examined.

Previous literature reviews have addressed some of the components of cosleeping. Medoff and Schaefer (1993) conducted a review of the advantages and disadvantages of cosleeping. These authors mainly focused on prevalence data and demographic information within the United States. Additionally, their study only included data up through 1992. A more contemporary and well-known review of this literature was completed by McKenna and McDade in 2005. The focus of their review was the connection between breastfeeding, SIDS, and cosleeping.

This thesis adds to the literature by offering a unique compilation of the research. It is the first review bringing together this information at such breadth. It is distinct from past reviews in that it examines components of the cosleeping research on SIDS, breastfeeding, anthropology, culture, and more. Additionally, it offers an emphasis on the long-term implications of cosleeping and provides suggestions regarding future directions for research in this topic area.

The first section of this thesis explains the definitions, the demographics, and the prevalence of cosleeping. The second section of this thesis explores the main factors to be considered regarding cosleeping including Sudden Infant Death Syndrome (SIDS), breastfeeding, sleep patterns, transitional object use, anthropology, and psychologically related risks. The third section of the thesis discusses the cultural concerns and perspectives associated with cosleeping. The fourth section describes the official American recommendations regarding the practice of cosleeping. The fifth section of the thesis discusses the research regarding the potential long term impacts of cosleeping. The final portion offers concluding remarks and directions for future research.

Definitions

Cosleeping can be defined as broadly as a child sleeping concurrently in the same room as an adult. For this thesis, the definition of cosleeping has been narrowed to include only cosleeping involving bedsharing. To be specific, “cosleeping is a broad term encompassing the sharing of any sleep surface with an infant by any other person” (McKenna & Mosko, 1993, p. 31).

Cosleeping has been defined in many ways in the literature. The confusion in defining cosleeping generally revolves around the diversity in the many forms cosleeping can take. Several authors have commented on the difficulties involved in defining cosleeping. General definitions do not help to specify any of the details of cosleeping, such as what the actual practice of cosleeping looks like. For example, in Hong Kong babies often sleep an arm’s distance away from their mothers on a hard surface, whereas in New Zealand cosleeping babies generally sleep on top of the bed covers in between the parents (Ball, 2007).

For most families, the choice to cosleep differs in duration per night, frequency, and motivation for cosleeping (Ball, 2007). Some children sleep in the parental bed every night all night. Some children cosleep one night a week. While others spend the first half of the night in their own bed, only to wander into their parents’ bed in the early hours of the morning. Additional difficulties in defining cosleeping arise when one considers the reasoning for cosleeping. According to Cortesi, Giannotti, Sebastiani, and Vagnoni (2004), “cosleeping has been reported as both a problem arising from, and as a solution to, infant and child sleep problems” (p. 28). Children may sleep in the parental bed for different reasons. For example, children who experience nightmares may spend the night

in their parents' bed because they are fearful of sleeping alone. In the household next door, a child may be sleeping in the parental bed due to a lifestyle choice the parents made. In an empirical study conducted by Cortesi, Giannotti, Sebastiani, and Vagnoni in 2004 with 901 healthy school-aged children, 72% of cosleeping children began cosleeping due to problematic bedtime sleep behaviors. Additionally, 8% began cosleeping in order to facilitate night-time breastfeeding, 10% began cosleeping because one of the parents coslept as a child, and 10% began cosleeping for other reasons.

In conclusion, while the term cosleeping has historically been used to describe several different varieties of parent-child sleeping, this thesis refers to cosleeping as a parent and child sleeping together on the same surface. The literature reviewed in this thesis uses the term cosleeping loosely. That said, when the reader sees the word 'cosleeping' there is no indication of frequency, infant age, or other correlates that should be assumed.

Prevalence

Although contrary to common practice in the United States, cosleeping is the predominant method of sleep in most cultures around the globe (McKenna & Mosko, 1993). Cosleeping is the most common form of sleep for the *majority* of cultures (Owens, 2004). An American study found the prevalence of repeated cosleeping for infants seven months and younger to be 5.5% in 1993 and 12.8% in 2000. While these statistics indicated a large increase in the commonality of cosleeping over seven years, they also support the concept that cosleeping in America is a relatively rare practice (Willinger et al., 2003). For school-aged children, prevalence rates have been reported between 4% and 23% (Jenni & O'Connor, 2005). One study found prevalence rates of cosleeping to be as high as 88%; however, this study examined whether children had ever slept in the parental bed without regard for frequency (Weimer et al., 2002). Interestingly, Gaylor, Burnham, Goodlin-Jones, and Anders (2005) reported that cosleeping rates had doubled within a decade in the United States, regardless of the reports in the literature of its possible dangers becoming more evident. There is no one number to account for the percentage of infants who cosleep, but there is consensus in the research that this behavior is the most common nighttime sleeping worldwide.

In conclusion, it is difficult to determine prevalence rates of cosleeping due to its diverse manifestations. However, it is clear that cosleeping is more commonly practiced worldwide than it is within the United States. Additionally, the data that is available suggests that cosleeping may be gradually becoming more common within the United States.

Demographics

Several studies have attempted to examine commonalities among families who cosleep. This research indicates that there are a number of factors that are more prevalent in cosleeping families. This section of the thesis presents the research regarding demographic information about families who engage in cosleeping practices.

In a survey of 101 caregivers in an urban setting, Weimer et al. (2002) found that families in the United States who coslept were generally single parent families with parents who had a high school education or less, and who had two or fewer rooms for sleeping in the home. Another study completed among African-American families in Missouri indicated the primary reason for cosleeping was an inability to afford safe cribs for infants (Sobralске & Gruber, 2009). Cosleeping in the United States has been shown to be associated with lower socioeconomic status, a lack of parental education, and increased family stress levels in Caucasian families. In Latino families in the United States, cosleeping is more common among single parents or when the cosleeping child is the first-born (Owens, 2004). These correlating factors were also supported by Li et al. (2009), who found that “after controlling for potential confounding effects, seven factors remained statistically significant in multivariate logistic regression models: younger age, poor family income, large family, children who did not have their own bedroom, children who did have their own bed, parents’ acceptance of bed sharing and a poor parental relationship” (p. 173).

Within the United States, a large national study found cosleeping to be more common among African American and Asian American families than among Caucasian families across all socioeconomic classes. Specifically, African American infants,

regardless of socioeconomic status, were found to be five times more likely than Caucasian infants to sleep in the parental bed (Willinger, Ko, Hoffman, Kessler, & Corwin, 2003). Several other studies have addressed the importance of socioeconomic status in rates of cosleeping. For example, Lozoff, Askew, and Wolf (1996), found the prevalence of cosleeping to be higher in households with a lower socioeconomic status. The authors also noted that cosleeping was common in African American families regardless of their socioeconomic status, but varied in Caucasian families by being less common in families of higher socioeconomic status.

In England, studies indicate just the opposite. Cosleeping in England is more prevalent among more affluent families. It was not found to be common for single mothers, younger mothers, nor larger families, as is often found in American studies (Ball, 2007). Similarly, in Thailand, correlations have been found between cosleeping and older maternal age, higher education, and mothers with professional careers (Anuntaseree et al., 2007).

In conclusion, the demographics of cosleeping differ depending on region. In the United States, cosleeping is more common among families with higher levels of stress, lower parental education levels, and lower socioeconomic status. In some other regions, such as England and Thailand, cosleeping is more common among families with higher socioeconomic status, higher parental education levels, and older parents.

Factors

This portion of the thesis examines and explores several factors related to cosleeping. Some of the factors point to beneficial aspects of this sleeping practice, while others point to consequential considerations. With the complexity of this topic, the reader will find that multiple authors have differing perspectives on several of these topics.

Each of the six sections presents two sides of the literature within different factors related to cosleeping. The sections include: SIDS, breastfeeding, sleeping patterns, transitional object use, anthropology, and potential psychologically related effects of cosleeping. Overall, a lot of information is presented to the reader. Unfortunately, the reader may be left feeling confused about whether cosleeping is beneficial or detrimental due to the prevalence of diverse opinions presented.

Sudden Infant Death Syndrome

Several pieces of the literature focus on the connection between cosleeping and Sudden Infant Death Syndrome (SIDS). SIDS is a rare, unexplained phenomenon which results in the death of infants, usually during sleep. The potential causes and prevention techniques for SIDS have been examined closely but the literature is conflicting. Below, the possible beneficial effects of cosleeping on SIDS are presented first, followed by several findings regarding the possible consequential effects of cosleeping on SIDS.

According to McKenna and McDade (2005), 16% of SIDS deaths were attributed to cosleeping and 36% of cases occurred when the baby was sleeping in a separate room. This is a powerful statistic, implying that solitary-sleeping infants are about twice as likely to die from SIDS than cosleeping infants. There are several different factors to consider, each with a different impact on SIDS. Cross-cultural findings indicate

consistency in that cultures with a low prevalence of SIDS generally practice cosleeping. In addition, these cultures also share several other factors: there is an absence of maternal smoking, the infant sleeps in the supine position (on its back), the child is breastfed, the child is held more often than not (not while sleeping), and the mother is responsive to her infant. In cultures where mothers smoke, children are not breastfed, infants sleep in the prone position (belly down), and children are separated from their parents at an early age (such as for solitary sleep), the rate of SIDS is higher (McKenna, 1996). The rates of SIDS seem to be impacted by several different confounding factors in several differing cultures. Certain countries show that with an increase in cosleeping rates, there is a decrease in the rates of SIDS. For example, in Hong Kong, where cosleeping is considered the norm, the rate of SIDS is very low. This trend is true for most Asian countries. Additionally, Canadian studies have indicated that when mothers both cosleep with and breastfeed their infants, the rates of SIDS are significantly reduced. Similar results have been cited in South Africa (McKenna & McDade, 2005).

While these findings are enough for some researchers to assert that cosleeping is a preventative measure for SIDS, these factors should each be addressed cautiously with the understanding that they may or may not be solely responsible for impacting rates of SIDS. This would be equivalent to citing any other factor as the main causal factor of SIDS. For example, simply because cultures who breastfeed have lower reported rates of SIDS does not mean that mothers who choose not to breastfeed are causing SIDS. Interestingly, McKenna also makes note that when looking at SIDS rates within the United States, the longer a subculture had lived in the United States, the higher their rate of SIDS. According to McKenna, this finding implies that more 'American' patterns of

sleep such as solitary-sleeping infants, raise the risk of SIDS (1996). It seems that there is evidence demonstrating that in certain countries, with certain extraneous factors, cosleeping can increase the rate of SIDS.

In the USA, there is an increased rate of SIDS among African American cultures who inhabit large, urban cities. Also, in New Zealand, Great Britain, and Australia, minority subcultures are often cited with high rates of SIDS (McKenna & McDade, 2005). Again, it is difficult to separate differing factors and their relative impact. One study found that cosleeping increased the risk of SIDS, but only when partnered with a lack of breastfeeding and maternal smoking (Fleming et al., 1996). The Chicago Infant Mortality Study examined 206 cases of SIDS and found that cosleeping infants only demonstrated an increased chance of SIDS when they were cosleeping with someone other than their mother or father (Hauck et al., 2003). There have been no single case control studies showing that cosleeping has a protective effect on SIDS. Case control studies have been conducted indicating that infants who cosleep may have an increased rate of SIDS when the mother engages in cigarette smoking, drinks alcohol before bed, or experiences extreme fatigue (Willinger et al., 2003).

Studies have been conducted to look at cases of SIDS more closely. One study found that cosleeping infants who died of SIDS were often discovered in dangerous situations. Specifically, 25 of the victims were found laying face down with their noses and mouths in the bedding (Kemp et al., 2000). Another study looked at four SIDS victims deaths: two of the infants were found deceased under a parent, one was found on the floor, and one was found at the bottom of the bed (Mesich, 2005). In these instances, it is a bit unclear as to whether the infants died from SIDS, suffocation, or another reason.

However, these deaths are a direct result of improper and unsafe cosleeping, supporting the theory that cosleeping is dangerous. In fact, the American Academy of Pediatrics has stated that there is no ground to recommend cosleeping as a strategy to reduce SIDS (AAP, 1997). In 1995, one set of researchers, Scragg, Stewart, Mitchell, Ford, and Thompson made the claim that “cosleeping in whatever form causes or necessarily increased the risk of SIDS and should therefore always be advised against” (p. 222).

Given all the contradictory research, it remains unclear as to whether cosleeping has an impact on the prevalence rate of SIDS. There are findings supporting and disconfirming the theory that cosleeping reduces the risk of SIDS. Considering that there are human lives at risk, more research should be conducted in order for parents to understand what the safest sleeping method for their family is based on differing factors.

Breastfeeding

There is a clear connection in the literature between breastfeeding and cosleeping across all cultures (Ball, 2007). Breastfeeding in itself has shown to offer unique nutritional benefits to infants, in addition to increasing mother-infant bonding (Ball, 2007). This portion of the thesis will first review the positive impact of concurrent cosleeping and breastfeeding. Next, it will review the contrasting research.

Regardless of race, within any given nation, cosleeping is more common when the infant is breastfeeding (Fu, Colson, Corwin, & Moon, 2008). Some would even say that cosleeping promotes breastfeeding, and the reasoning for this is simple: a mother and an infant sleeping next to each other can engage in breastfeeding with much greater ease (McKenna & McDade, 2005). Also, research indicates that with this level of ease comes an increased amount of sleep for breastfeeding mothers who cosleep (Quillin & Glenn,

2004). Literature also indicates that infants who cosleep breastfeed twice as often as solitary-sleeping infants. The total accumulated time spent nursing each night is three times as long in cosleeping infants than it is in solitary-sleeping infants (McKenna, Mosko, and Richard, 1997). This could potentially be perceived as a positive aspect of cosleeping or a negative one. Seemingly contrary to some research findings, these mothers would actually sleep less. However, an increase in the frequency of nocturnal breastfeeding can prolong the suppression of maternal ovulation and can aid in the prevention of some cancers (Mesich, 2005). Cosleeping helps to make breastfeeding feel like less “hard work” and may encourage mothers to breastfeed for a longer portion of the infant’s life (Ball, 2003). Some researchers have expressed concern that anti-cosleeping advocates may cause a decrease in the prevalence of breastfeeding (Ball, 2003). This concern does not take into account the number of mothers who breastfeed and do not engage in cosleeping.

It is important to note that the data regarding cosleeping and breastfeeding is correlational, rather than causal. It is yet unclear whether cosleeping promotes breastfeeding or breastfeeding promotes cosleeping (McCoy et al., 2004). Although these two practices occur together in some households, in some populations no evidence has been shown to associate bed sharing with the initiation of breastfeeding or concurrent breastfeeding and cosleeping (Brenner et al., 2003).

In conclusion, several researchers have suggested that the potentially beneficial impact that cosleeping has on breastfeeding rates outweighs the possible risks associated with cosleeping, such as SIDS or accidental deaths (Wailoo, Ball, Fleming, & Platt, 2004). The advocates for concurrent cosleeping and breastfeeding have clearly defined

their reasoning in the literature, and it seems there is a dearth of literature contradicting these views.

Sleep Patterns

Several studies in the literature address the impact of cosleeping on sleep patterns. In general, cosleeping children have been found to awaken more frequently during the night and sleep lighter than solitary-sleeping children. Proponents of cosleeping are able to consider these factors to offer theories as to why cosleeping is a positive practice, while opponents present these same factors to discount cosleeping.

Cosleeping can have an impact on an infant's quality of sleep. Several studies have been conducted to examine the differences in sleep between cosleeping infants and solitary-sleeping infants. There is information suggesting that cosleeping infants tend to sleep lighter with shorter periods of deep sleep than solitary-sleeping infants (Richard, Mosko, McKenna, & Drummond, 1996). Cosleeping is also associated with a higher frequency of nighttime awakenings for infants (McKenna, Mosko, & Richard, 1997). One study indicated that frequent nighttime awakenings do not seem to be correlated to any behavior other than cosleeping (Crowell, Keener, Ginsberg, & Anders, 1987).

When examined more closely, these nighttime awakenings show an interesting pattern. While cosleeping infants awaken more often throughout the night, their overall time spent awake in the night is similar to that of solitary-sleeping infants. This implies that while the cosleeping infants are awakening more often, these awakenings are briefer in duration than those of solitary-sleeping infants (Mao, Burnham, Goodlin-Jones, Gaylor, & Anders, 2004). Some authors have theorized that the increase in light sleep in cosleeping children may serve to allow for easier arousal during a life-threatening event,

such as suffocation. Infants caught up in the deep stages of sleep may be unable to arouse in times of physical distress. This factor may result in a reduction of the rate of SIDS in cosleeping children (Mao, Burnham, Goodlin-Jones, Gaylor, & Anders, 2004).

This perception of the data is a bit skewed and limited. It fails to take into account the negative effects of fragmented sleep (Hunsley & Thoman, 2002). Some researchers claim this “fragmented” form of sleep is beneficial, while others find it detrimental to infants’ development.

Quality sleep is of immense importance for the developing infant. According to Jenni and O’Connor (2005), the deep stages of sleep offer two main functions. It can serve restorative purposes for brain metabolism and it is used for memory consolidation and learning. Regular cosleeping in the early months of life, in correlation with poor nighttime sleeping patterns, may have a negative impact on neurobehavioral functioning of infants (Hunsley & Thoman, 2002). This form of fragmented sleep causes stress in the infant and has a negative effect on development (Mesich, 2005). At any age, fragmented sleep can lead to higher rates of illness, poor cognitive functioning, and potentially long-term negative impact on the development of the central nervous system (Bonnet, 1986).

In cosleeping families, children are not only more likely to wake up more frequently during the night, they are also more likely to have difficulty falling asleep (Mao, Burnham, Goodlin-Jones, Gaylor, & Anders, 2004). Additionally, cosleeping children often become accustomed to falling asleep with their parents nearby; these children generally have a very difficult time initiating sleep independently (Cortesi, Giannotti, & Sebastiani, 2008). Research has indicated that children who sleep independently tend to have more regular bedtimes and bedtime routines than cosleeping

children (Crowell, Keener, Ginsberg, & Anders, 1987). Generally, parents of cosleeping infants report higher rates of sleep problems, nighttime fears, bedtime resistance, and sleep anxiety than do parents of solitary-sleeping infants (Cortesi, Giannotti, & Sebastiani, 2008).

In summary, cosleeping infants experience more fragmented sleep than solitary-sleeping infants. Fragmented sleep may offer preventative effects on SIDS due to a higher rate of light sleep, and the increased ability of an infant to awaken if necessary. Fragmented sleep may also negatively impact an infant's neurological development, stress level, central nervous system development, and immune system. The question of whether the benefits of fragmented sleep outweigh the negative consequences remains unanswered.

Transitional Objects

The literature indicates that there are differences in the usage of transitional objects between children who cosleep and solitary-sleeping children. A transitional object is the term used to refer to a "security blanket," a stuffed animal, or another object that the child uses to self-soothe. The literature implies that there are differing opinions regarding the use of these objects.

As John Bowlby predicted in 1969, children who spend the majority of their day in close contact with their parents are less likely to engage in the use of a transitional object (Green, Groves, & Tegano, 2004). Research has indicated that solitary-sleeping infants were significantly more likely than cosleepers to use a transitional object at bedtime (Hayes, Roberts, & Stowe, 1996).

Multiple psychoanalysts would argue that using a transitional object is normal and is associated with healthy child development (Green, Groves, & Tegano, 2004). Some research suggests that children who do not use a transitional object are more likely to be institutionalized or suffer from a form of psychopathology than children who do (Green, Groves, & Tegano, 2004). These researchers claim that the use of transitional objects serves as an adaptation made by the infant to comfort itself during stress (Green, Groves, & Tegano, 2004).

In conclusion, cosleeping children use transitional objects less often than solitary-sleeping infants. However, in the American culture, the use of a transitional object can be considered a healthy way for an infant to find comfort in the absence of their parent and may have positive psychological effects.

Anthropology

A common theme among the literature involves the concept of human ancestry and the history of cosleeping in our species. Proponents of cosleeping advocate that cosleeping is an innate form of sleeping for the human species. Opponents of cosleeping propose that as modern culture has changed and shifted, these classic perceptions of the human species have become outdated. Both of these opinions are represented below in more depth.

An often-cited argument in defense of cosleeping revolves around the anthropological evidence that cosleeping is a natural phenomenon for our species. It is possible that cosleeping is an instinctive, evolved behavior. Historically, close contact between mothers and infants during the night is documented as consistent across both primate relatives and hominin ancestors (Konner & Super, 1987). There is clear evidence

showing that human mothers sleep in a similar position with an infant as female great apes sleep with their small infants. Generally, both species will sleep curled up around their infants, suggesting that cosleeping may have the evolutionary purpose of infant protection and safety (Ball, 2006). Okami, Weisner, and Olmstead (2002) state that continuous mother-infant contact during the night is a characteristic of all non-human higher primates. The sleep patterns of infant primates are similar to those of humans in support of the concept that human infants are not ready for a night of unbroken sleep by four months as many parenting books suggest. Infants of this age, as seen in primate infants, are physiologically adapted to frequent feedings and close contact with their mothers throughout the night (Ball, 2003).

Additional evidence for the anthropological drive to cosleep comes from examining the patterns of infant primates when left alone in their nest. Mammalian infants left alone generally do not cry nor defecate until their mother returns in order to prevent predators from finding them. Human infants, on the other hand, when left alone will generally cry and/or defecate spontaneously. This behavior may indicate that human infants are not meant to be left alone. Keeping human infants close to their mothers is a safer and more evolutionarily stable option (McKenna & McDade, 2005). McKenna and McDade (2005) make this strong statement: “mother-infant cosleeping represents the most biologically appropriate sleeping arrangement for humans and both ancient and ubiquitous simply because breastfeeding is not possible, nor as easily managed, without it” (p. 137).

In contrast, some researchers have brought attention to the concept that perhaps these historical references are no longer applicable. For example, the current risks of

cosleeping are in part a result of sleeping on soft, elevated mattresses with warm comfortable blankets. Humans did not evolve their sleeping habits under such conditions. Primitive humans slept on hard, cold surfaces that would have necessitated keeping infants close by for temperature regulation and safety. Also, it is unknown how frequently or under what conditions infants died when sharing the parental “bed” in the early stages of our evolution (Hunsley & Thoman, 2002). Scragg, Stewart, Mitchell, Ford, and Thompson (1995) suggest that cosleeping has probably outlived its historical usefulness in modern day society.

In conclusion, although several authors have cited the anthropological importance of cosleeping, several others have pointed out that these components may no longer be relevant to modern humans. It is important to consider its application and bearing when using this as an argument in support of cosleeping.

Psychologically-Related Risks

There are several potential risks associated with cosleeping. Some of these have been cited previously. One researcher states: “there is far more evidence suggesting negative socioemotional and physiological consequences to infants sleeping socially distant from their parents than evidence suggesting inherent negative effects of increased contact or proximity” (McKenna, 1996, p. 212). Additionally, McKenna (1996) goes on to say there are no “scientific” studies in which the benefits of solitary-sleeping are shown. Nine years later this researcher adds to his advocacy by stating that sleeping with one’s baby is not bad, irresponsible, or criminal. Rather, it is normal and expected of affectionate and healthy parents (McKenna & McDade, 2005). Cosleeping infants have

less complex nighttime rituals because sleep does not coincide with a separation from one's parents and is thus a 'non-event' (Hayes, Roberts, & Stowe, 1996).

In direct contrast to previously stated research, cosleeping infants show a lower risk of having bad dreams (Simard et al., 2008). Mothers of cosleeping infants sometimes report more fulfilling sleep (Kennedy, Gardiner, Gay, & Lee, 2007). Cosleeping infants have been said to experience a greater amount of maternal contact, maternal eye contact, increased breastfeeding, and more immediate maternal responses (Baddock, Galland, Bolton, Williams, & Taylor, 2006). This correlation may exist because infants are spending more time in closer proximity to their mothers, rather than an intentional parenting difference. A study with a sample population of military families concluded that cosleeping children received higher rankings from their teachers and were less likely to suffer from psychological disorders (McKenna, 1996). Across several studies, children who are solitary-sleepers have been found to be harder to control, less creative, less independent, less happy, and more reactive (McKenna & McDade, 2005).

Of particular concern is when cosleeping is practiced in an unsafe manner. One writer reflects, "placing children younger than 2 to sleep in adult beds exposes them to fatal hazards that are generally not recognized by the parent or caregiver. These hazards include overlying by a parent, sibling, or other adult sharing the bed; entrapment or wedging of the child between the mattress and another object; head entrapment in bed railing; and suffocation on waterbeds" (Nakamura, Wind, & Danello, 1999, p. 1019). In contrast, McKenna and McDade (2005) report distaste for the idea of mothers being regarded as "lethal weapons or wooden rolling pins" based on the theory that mothers are generally aware of their actions and positions during the night when cosleeping (p. 135).

Evidence indicates that cosleeping infants are in danger of mortality particularly when the mother is obese or engages in frequent tobacco use (Okami, Weisner, & Olmstead, 2002).

Cosleeping children generally have higher rates of sleep apnea and disturbed nighttime breathing patterns (Richard, Mosko, McKenna & Drummond, 1996). An infant's sleep environment has a large impact the child's health (Willinger et al., 2003). In particular, infants who cosleep are more likely to suffer from overheating or may lack temperature regulation skills. Cosleeping children are 2.9 times more likely than non-cosleeping infants to sleep underneath two or more bed covers. Furthermore, cosleeping infants were twice as likely to be kept under the covers, regardless of the room temperature across several geographic regions (Willinger et al., 2003).

Over the course of several decades, research has provided several reasons as to why cosleeping may have a negative impact on parents and children. Cosleeping has been shown to impede parental sleep. Mothers who cosleep report a greater number of arousals throughout the night (McKenna et al., 1997). Along the same lines, using polysomnographic technologies, one study found that mothers aroused 30% more frequently when they were cosleeping (McKenna & McDade, 2005).

Another reason researchers cite in favor of avoiding cosleeping is the concept that cosleeping presents a moral dilemma regarding parental privacy and the risk of children traumatically witnessing adult actions inappropriately. Having children sleep in the parental bed may even amplify Oedipal conflicts and convey messages of seduction to the children (Okami, 1995). Cosleeping interferes with the continuity of the parental sexual relationship and intimacy. Adding a third person to the bed can result in a distraction and a competition for the attention and affection of one of the sexual partners

(Stein, Colarusso, McKenna, & Powers, 1997). Cosleeping parents also report higher levels of psychological distress and marital maladjustment (Cortesi, Giannotti, & Sebastiani, 2008).

Cosleeping also runs the risk of producing confusion and anxiety in a child, rather than reassurance and relaxation (McKenna & McDade, 2005). Cosleeping can be fatal to infants when practiced unsafely. Cosleeping increases an infant's risk of rebreathing air and overheating (Fu, Colson, Corwin, & Moon, 2008). Independent of the geographic region or room temperature, infants who cosleep are 2.9 times more likely to sleep under more than 2 bed covers (Willinger et al., 2003).

In a study by Kelmanson (1993), infants who sleep alone were rated to have the most positive mood compared to cosleeping infants, who were rated to have the most negative mood. Children who cosleep may acquire abnormal psychological dependency, increased sleeping problems, and psychosexual confusion (Sobralke & Gruber, 2009). Sleep disorders and daytime behavior problems are also more common in cosleeping infants (Hayes, Roberts, & Stowe, 1996). Research suggests that cosleeping children have more difficulty when experiencing separation from their parents during the day (Morelli, Rogoff, Oppenheim, & Goldsmith, 1992). In one study, 90% of cosleepers reported nighttime fears, whereas only 15% of solitary-sleepers reported nighttime fears. Cosleeping infants also displayed more sleep-related anxiety on the Children's Sleep Habits Questionnaire. These results indicate that cosleeping infants have more difficulty sleeping away from home, have a fear of sleeping alone, have a fear of sleeping in the dark, and require a parent to be present in order to fall asleep. The same study found that

cosleeping childrens' scores on the Child Behavior Checklist indicated they experience higher levels of emotional distress (Cortesi, Giannotti, & Sebastiani, 2008).

Cosleeping has been said to possibly interfere with the process of an infant's individuation process (Okami, Weisner, & Olmstead, 2002). Cosleeping may actually foster dependency, it may be addictive and habit forming, it may be sexually arousing, overstimulating, and frightening. Cosleeping may poor limit setting and unclear boundaries (Ball, Hooker, & Kelly, 1999).

When considering all of these points, it would be reasonable to conclude there are a myriad of reasons why cosleeping is potentially harmful to the infant. However, as previously stated, there is also research advocating for cosleeping, some of which directly contradicts what has been already been presented here. In conclusion, it is not clear whether there are psychological effects of cosleeping, nor whether these effects are positive or negative. In this thesis, up to this point, several components regarding the possible benefits and possible risks of cosleeping have been presented. Many of the represented opinions do not confer with each other.

Cultural Concerns

As stated previously, cosleeping follows cultural trends and is seen as a common practice among many different types of people. This portion of the thesis will review some of the present literature regarding the patterns of cosleeping of different cultures. In addition, the intellectual reasoning for cosleeping from differing cultures has been reviewed.

According to Jenni and O'Connor (2005): "how we sleep, with whom we sleep, and where we sleep are molded by culture and customs" (p. 206). While it is common in the United States for a child to have a private bedroom or nursery, this practice is considered an exception to the rule when perceived on a worldwide scale (Jenni & O'Connor, 2005). While some trends in these cultural differences are made clear by the literature, others become clouded as conflicted data and opinions emerge. One study reports that any countries that practice solitary-sleeping are both Westernized and industrialized (McKenna & McDade, 2005). However, there is direct evidence conflicting with this report when one takes into account Eastern, industrialized countries that chose to cosleep, such as Japan. Additionally, it has been noted that communities who practice cosleeping are generally varied in several cultural components, including both highly technological and less technological communities (Morelli, Rogoff, Oppenheim, & Goldsmith, 1992).

One study in the United States examined advice offered in parenting books regarding sleeping positions for infants. The study found that 28% of the books endorsed cosleeping, 32% took no position, and 40% opposed it (Ramos & Youngclarke, 2006). This study confirms the rare American belief that cosleeping is looked down upon;

however, one must question why several other countries do not share this sentiment. One such book written by Dr. Richard Ferber warns, “if you find that you actually prefer to sleep with your infant you should consider your own feelings very carefully.” This implies that there is something fundamentally wrong with the desire to cosleep. However, McKenna and McDade (2005), argue that perhaps one should be saying “if you actually prefer to place your infant in a different room to sleep, you should consider your own feelings very carefully” (p. 137). Each writer offers possible perceptions behind cosleeping; however, they each write from vastly different cultural viewpoints. The literature regarding the culture behind cosleeping is passionately written because it is based on strongly-held beliefs regarding parenting and the potential implications that infant sleep positions have on the future of the child.

Cosleeping is not merely a method of sleeping, but a cultural value. In several countries, cosleeping is regarded not only as common practice, but necessary for a healthy bonding experience offering the opportunity for the child to experience warmth, protection, and a sense of well being. The competing ideologies revolve around differing perceptions of what is best for the infant. Generally, this competition can best be related to ‘individualist’ versus ‘collectivist’ cultures. For example, Japan and the United States are highly successful, industrialized, modern countries. The deep cultural differences between these countries shape how children customarily sleep. Japan focuses on interdependence and promotes cosleeping, whereas the United States aims for independence and frowns upon cosleeping (Jenni & O’Connor, 2005). These cultural emphases have been said to be the ‘driving force’ behind deciphering sleeping arrangements for infants. Additionally, Japanese and American parents have different

perceptions of the growth and development of infants. In Japan, an infant is viewed upon birth as a separate biological entity who needs to be interwoven into the collectivist culture. In America, infants are perceived as dependent organisms at birth, in need of individuation experiences in order to become independent (Jenni & O'Connor, 2005).

It is true that for many Asian cultures, the parenting emphasis is on building mutual dependence rather than independence (Owens, 2004). The society of Bali shares similarly strong ideas about cosleeping to those of Japan. In Bali, infants are generally held at all times, day or night. For a person of any age, sleeping alone is regarded as extremely undesirable due to the cultural belief that when sleeping alone one becomes vulnerable to spiritual risks, such as “soul loss” (Jenni & O'Connor, 2005, p. 209). Reportedly, the Mayan communities in Guatemala have a similar cultural practice. They believe that sleeping alone is an undesired hardship for children or adults of any age (Milan, Snow, & Belay, 2007). The Mayan culture believes cosleeping aids in desirable socialization goals and may be necessary for infant survival. It should be noted that a middle class American baby does not experience the same risks or dangers that a Mayan baby would, such as malnutrition or illness. Additionally, babies and toddlers are not perceived as accountable for their actions in the Mayan culture, so they are not punished for bad behavior. Children are considered to be ill-equipped for any level of separation from their families, particularly from their mothers (Morelli, Rogoff, Oppenheim, & Goldsmith, 1992).

Italy offers similar conceptions of cosleeping, often preferring infants to cosleep regardless of the availability of a separate room. Reportedly, Italians perceive the American practice of solitary sleep for infants as unkind (Jenni & O'Connor, 2005).

Another example of a modernized, industrial society that advocates for cosleeping is Sweden (Welles-Nystrom, 2005). This is unique because Sweden generally adheres to Western values of independence rather than Eastern values of collectivism. Swedish parents operate under the belief that cosleeping is a good developmental practice for their infants. They believe that if a child prefers the comfort, safety, and security of the parental bed, encouraging cosleeping will help the child become more independent and secure in the future (Welles-Nystrom, 2005). In a similar vein, researchers report cosleeping may offer the infant a sense of comfort, happiness and security, thereby aiding in the development of a sense of independence (Gibson, Dembofsky, Rubin, & Greenspan, 2000). Cosleeping has also been cited as a formative way to encourage the development of interpersonal relationships in some communities (Morelli, Rogoff, Oppenheim, & Goldsmith, 1992).

One author noted that cosleeping in these cultures is not something that is “encouraged,” rather it “just happens.” The author went on to explain the normalcy of cosleeping by comparing it to Asian cultures eating rice. Dettwyler (1995) writes, “Rice simply is the staple of Asian diets, babies simply are carried on their mother’s back in Africa, and parents and children simply do sleep together in much of the world, including many U.S. households” (p. 44). Dettwyler also makes the bold statement that an accurate review of the literature regarding cosleeping would result in one discovering that “cosleeping is the normal, accepted pattern of night-time behavior in most cultures of the world today, as it has been throughout human evolution” (p. 45).

Researchers have examined the contrast between Japanese children’s sleeping behaviors and those of American children. In a study by Latz, Wolf, and Lozoff (1999), it

was found that Japanese children engaged in planned cosleeping with their parents more than three nights a week. American children were more likely to participate in reactive cosleeping less than three nights a week. The Japanese children did not have any reported sleep problems, while the American children experienced more bedtime struggles, more night wakings, and more overall stressful sleep problems (Latz, Wolf, & Lozoff, 1999). Based on this study, it is possible that the reason for cosleeping (planned vs. reactive) may have an impact on children's nighttime behaviors.

Germany, a country that also values independence and autonomy, also frowns upon cosleeping for the same reasons as the United States. In both countries, the standard form of sleep is solitary. Cosleeping is oftentimes considered dangerous, impractical, and is believed to contribute to bad behaviors later in life. Both of these countries believe that in order to start the child on the road to success, they must begin 'independence training' from a very young age (Milan, Snow, & Belay, 2007).

Many American mothers perceive cosleeping as a difficult habit to break and suggest that babies need to be trained to become self-reliant and independent from infancy forward (Morelli, Rogoff, Oppenheim, & Goldsmith, 1992). One study reports the ability to self-soothe from infancy is predictive of the child's capacity for self-reliance, good sleep hygiene, and other adult competencies later in life (McKenna & McDade, 2005). Child care experts in the United States encourage parents to allow infants to soothe themselves and reduce the amount of night-feedings and nighttime contact, in order for the child to learn to become autonomous (McKenna & McDade, 2005). Some believe one of the first things an infant is capable of learning is to self-soothe. Babies are often left alone to cry and given the opportunity to learn to comfort

themselves, thereby aiding in the development of competency and self-esteem. Infants who are not provided this opportunity will not be able to perceive themselves as capable beings (Schön & Silvén, 2007). Children who become dependent on a sleeping partner from infancy are more likely to suffer from sleep disorders, including difficulties falling asleep alone and seeking out parental attention after even minor nighttime arousals (Hayes, Roberts, & Stowe, 1996). In general, parenting behaviors that interfere with a child's ability to self-soothe throughout the night increase the risk of sleep disturbances in children (Simard, Nielsen, Tremblay, Boivin, & Montplaisir, 2008). In the United States, it is believed children must be separated from their parents at as young of an age as possible in order for healthy psychological development (Morelli, Rogoff, Oppenheim, & Goldsmith, 1992).

One child rearing expert reiterates the importance of solitary sleep. Stein, Colarusso, McKenna, & Powers (1997) state that by two to three months of age, a healthy infant is beginning the separation-individuation process naturally. As an infant ages, it begins to crawl, walk, and talk. These abilities aid to promote the independence of the infant, as it is able to begin to separate itself from the parents both physically and emotionally. Toddlers often display behaviors showing their desire for independence, i.e. running away from their parents, or claiming toys as "mine." According to Stein, Colarusso, McKenna, and Powers (1997), cosleeping impedes this natural desire for independence, causing confusion and an unhealthy, exaggerated level of dependence on the parents. When children reach the age of two, they begin the process of developing their own sexual identity. Children of this age begin to realize the differences between females and males and how the two sexes interact with one another. Cosleeping may

cause confusion and overstimulation by providing the nightly opportunity for a toddler to engage in contact with adult bodies. This may result in bewilderment for these children later in life.

Simply stated by one of the most influential and controversial parenting experts in the United States, three main sleeping rules must be followed in order to encourage independent children. First, children should fall asleep in their own bed. Second, children should fall asleep alone, without parental attention or presence. And third, children should not be taken into the parental bed for any reason (Spock, 1945). Spock's writings represent an extreme version of North American sleeping values.

It must be noted there are several authors in the cosleeping literature who find the American concept of solitary-sleeping to be simply "folk wisdom" and not grounded in empirical fact. This concept of solitary-sleeping is sometimes referred to as a moral value that is strongly upheld like a sacred religious belief even though there is research reporting potential benefits of cosleeping (McKenna & McDade, 2005). To date, no study has specifically shown that if an infant engages in solitary-sleeping habits they will gain independence. Also, no study has directly shown that cosleeping results in negative psychological consequences, unless the cosleeping occurs in a family engulfed in other disordered ways of being or if the cosleeping occurs in a dangerous setting (McKenna & McDade, 2005). Some believe that forcing a child to sleep on their own may result in a failure for the child to learn intimacy, resulting in shallow children who become insensitive and learn to maintain distant relationships with others (Okami, 1995). One author questions the connection between sleeping alone and independence by noting that during historical periods when independence was most valued in the United States such

as during colonial times or the westward movement, children were not likely to sleep alone (Morelli, Rogoff, Oppenheim, & Goldsmith, 1992).

Some authors even perceive solitary-sleeping as a selfish parenting practice, used in order to protect the husband-wife relationship in the bedroom (McKenna & McDade, 2005). Researchers have warned parents about the possibility of inflicting trauma upon their children by allowing them to witness parental intercourse. Cosleeping may send confusing mixed messages to children regarding comfort, prohibition, and seduction (Okami, 1995). Parents have concerns regarding privacy and intimacy. One American mother reported her husband's concerns: "My husband did not like the idea of cosleeping. He was afraid that it would be unnatural, too much intimacy" (Morelli, Rogoff, Oppenheim, & Goldsmith, 1992, p. 607). Having a third person in the parental bed is distracting and adds a component of competition for attention and affection from one or both of the parents (Stein, Colarusso, McKenna, & Powers, 1997). Studies have also indicated that parents who cosleep report significantly higher levels of marital distress compared to those who do not cosleep (Cortesi, Giannotti, & Sebastiani, 2008).

An additional viewpoint of this argument revolves around the concept that sleep itself is perceived differently in diverse cultures. Sleep patterns across cultures are not uniform. In the United States, humans often aim to sleep for an uninterrupted eight hour time period at night. In some other countries, people awaken during the night to play or eat. Also, some countries commonly practice engaging in long daytime naps (Jenni & O'Connor, 2005). These different sleeping patterns may play a role in the location of an infant while sleeping. In the United States, sleep is perceived as an individual activity that is not associated with social behaviors. In other countries, sleep is sometimes perceived

as a social behavior. When sleep is considered a social activity, it is reasonable to conclude that cosleeping is expected and preferred as it shapes an infant's social skills. Cosleeping in this context would therefore be an important foundation to relationship patterns later in life (Worthman & Brown, 2007).

The ideology of "Natural Parenting" holds that cosleeping is a natural, instinctive way of nurturing a child that is essential to human existence (Mesich, 2005). This group of people believe that cosleeping is a logical nighttime continuation of skin-to-skin or kangaroo care during the day, which is believed to be essential to the development of the infant's sleep biology and the mother's feeding physiology (Ball, 2003). The mothers in this culture report that cosleeping with their infant was optimal because it soothed the infant, reduced the disruptions in parental sleep associated with feedings, reduced parental anxiety revolving around the safety of their infants, and helped to enhance parental feelings of closeness with their infants (Ball, Hooker, & Kelly, 1999). Cosleeping is thought to enhance the infant's level of attachment (Tan, 2009). Additionally, cosleeping is thought to provide a large number of benefits to the infant such as a capacity for trust and intimacy and feelings of security (Okami, Weisner, & Olmstead, 2002).

Official Recommendations

This portion of the thesis offers a general idea of the official recommendations in the United States regarding cosleeping. In 2000, the American Academy of Pediatrics (AAP) concluded that there was not enough data to provide a definitive recommendation on cosleeping. Five years later, the AAP recommends against cosleeping due to its association with higher rates of SIDS (AAP, 2005). One researcher disputed this recommendation by stating there is very little scientific evidence to support the concept that cosleeping is detrimental when parents do it safely (Sobralaske & Gruber, 2009). A large nonprofit organization, La Leche League International, encourages cosleeping because they perceive it as safe and beneficial for the infant (Sobralaske & Gruber, 2009). The Consumer Product Safety Commission recommends that children under the age of two years old should sleep alone in cribs that are federally approved (Hunsley & Thoman, 2002). In 1999, Ann Brown, the commissioner of the Consumer Product Safety Commission advised parents to not sleep with their baby and to not put the baby down to sleep in an adult bed (McKenna & McDade, 2005). The consensus of these recommendations is that cosleeping is not a safe form of sleeping for infants in the United States.

Long-term Implications

Despite the plethora of research in the area, the question of whether to cosleep or not remains unanswered. Some researchers have attempted to answer this question by addressing the long-term impact that cosleeping has on children. Studying the long-term implications of cosleeping has been seemingly overlooked by most researchers. However, a few such studies are presented here.

A study by Lewis and Janda found that in a sample of 210 undergraduate students who coslept as children were more satisfied with their sexual identities and reported feeling better adjusted than students who did not cosleep as children (McKenna, Mosko, & Richard, 1997). These students were asked to complete an extensive survey regarding their experiences during childhood related to cosleeping, exposure to parental nudity, and perceived parental comfort level towards sexuality. Additionally, the subjects were asked to answer questions related to their current relationships and sexual comfort. As stated above, the results indicated that children whom coslept reported higher levels of both self-esteem and sexual comfort (Lewis & Janda, 1988).

This empirical study carries with it several limitations. First, the research is currently over twenty years old. Secondly, the participants were college students asked to fill out a retrospective survey about their sleeping habits as children. It is possible that their memories from infancy are not as vivid as the researchers would hope. This limitation also means that the results are not generalizable to a population beyond those in this study. Additionally, although the researchers found significant relationships, the relationships were still modest (all had a correlation level of less than $p = 0.30$). Another limitation is that the students completed the survey in a large group setting. It is possible

college age students would have a difficult time being honest on a survey like this due to the strong pull for impression management that impacts people in this age group (Lewis & Janda, 1988).

Okami, Weisner, and Olmstead (2002) conducted an 18-year longitudinal study examining the long term effects of cosleeping in the United States. The authors followed 205 families from 1975 to 1993. One child from each family was followed from birth through age 18. Throughout this period the researchers engaged in and drew information from home observations, child assessments, school grades, and parent and child interviews and questionnaires. At age six, the children who were cosleeping were found to have significantly higher cognitive competency than solitary-sleeping children. At that time, there were no significant correlations between sleeping arrangements and sleep problems or sexual pathology. At age 18, the study did not indicate any significant positive or negative long term effects of cosleeping. These authors concluded that there is no evidence to support the concept that cosleeping has detrimental effects on children.

This study comes with unique limitations as well. For example, the authors note that they did not utilize accurate nor detailed measures of cosleeping. Their cosleeping measures failed to take into account frequency, duration, or proximity. The authors also state that although significant results were found, their effect sizes were small. The largest correlation in this study was $r = 0.15$ (Okami, Weisner, & Olmstead, 2002).

According to Maccarin (1995), no differences were found in a study between adults who coslept and adults who did not cosleep as children in several categories: sleep disturbance, separation anxiety, night terrors and phobias, sexual preoccupation, and

social competence. Also, it was found that women who coslept as children reported higher self-esteem than those who did not cosleep (McKenna & McDade, 2005).

Some common themes in these studies are that cosleeping may assist with increased self-esteem and sexual comfort in adulthood. Additionally, there is consensus that there are no major differences in adults who coslept and those who did not. This information is based on very few studies. In the field of psychology, this is simply not enough to draw affirmative conclusions on this topic and more research is needed.

Conclusions and Future Directions

The only conclusion that is clear from this research is that the research is lacking, contradictory, and confusing. Research suggests that cosleeping can be regarded as a healthy practice when secure and affectionate relationships exist within the family. Cosleeping can also be an unhealthy practice amplifying sleep difficulties in families where hostile or alienated relationships are evident (Worthman & Brown, 2007). One study found no significant emotional or behavioral differences between cosleepers and solitary sleepers on the Child Behavior Checklist (Cortesi, Giannotti, Sebastiani, & Vagnoni, 2004). This leads one to believe that perhaps cosleeping can be both beneficial and detrimental depending on several different factors.

This unique thesis has provided a current review of the literature regarding many aspects of cosleeping. In summary, cosleeping is the most prevalent form of infant sleep. However, it is practiced by few in the United States. Due to the potential dangers associated with cosleeping, agencies within the United States do not recommend it (AAP, 2005). Cosleeping may result in fragmented sleep patterns and thus, stunted neurological growth in infants (Mosko, Richard, McKenna, & Drummond, 1996). Cosleeping has been considered dangerous and anxiety provoking for children and parents (Nakamura, Wind, & Danello, 1999). Infants who cosleep have been found to be less likely to utilize transitional objects such as safety blankets (Hayes, Roberts, & Stowe, 1996).

Researchers have noted an anthropological connection to cosleeping (Konner & Super, 1987). This form of sleep has also been cited as a possible preventive factor for SIDS (McKenna & McDade, 2005), and it has been linked to increased rates of breastfeeding (Ball, 2003).

Evidence-based science has not been able to decipher whether children should or should not sleep in the parental bed and most of the research that does make recommendations is based on societal norms and folk assumptions (McKenna & McDade, 2005). Continued research, particularly on the long-term impact of cosleeping, is much needed in order to aid parents in making a more educated decision. Long term research should be specific about its measures of cosleeping, using a diverse sample, and when possible, using multiple methods to evaluate the impact of cosleeping. Also, a distinction should be made in the literature in regard to differences between infants cosleeping and children cosleeping (Okami, Weisner, & Olmstead, 2002). As more information adds to the knowledge base of cosleeping, this debate may become less about right and wrong, and more about how to make the right decision based on one's family values. As suggested by McKenna and McDade (2005), there may be more than one right way for infants to sleep.

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