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THE IMPACT OF SUICIDE ON FAMILY SURVIVORS:
A REVIEW OF THE LITERATURE AND
A PROPOSAL FOR FUTURE STUDY

KATHERINE DAVIS
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Reviewed and approved* by the following:

Dr. Keith Aronson
Associate Director, Social Science Research Institute
Thesis Advisor

Kathryn Hynes
Assistant Professor in Human Development and Family Studies
Honors Advisor

* Signatures are on file in the Schreyer Honors College
Abstract

There are roughly six to ten survivors for every suicide. The effects that the surviving spouses, children, and parents have to endure are extensive and unique to this particular bereavement group. Evidence has shown that the main factor separating those who are bereaving suicide and those who are bereaving a different form of death is stigma. Children tend to blame themselves, spouses’ daily roles are disrupted, and parents become depressed and guilt-stricken. One population that has not been studied at all is military families and how they cope with the suicide of a veteran. Because rates of military suicide have been progressively increasing since Operation Iraqi Freedom/Operation Enduring Freedom, more and more families are losing their loved ones. In order to begin studying this phenomenon, a future study of Marine spouse and children has been proposed and how the impact of suicide has affected their lives.
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The topic of death and dying is never an easy one to broach. When suicide is involved, it becomes even more difficult. However, it is an unfortunate phenomenon that has been around for quite some time and is by no means diminishing anytime soon. In fact, in the United States suicide was the tenth leading cause of death as of 2007; this equates to 11.48 suicides per 100,000 people or 30,000 people total (Center for Disease Control and Prevention, 2007). There have been numerous studies and reviews about methods used, demographic differences, and possible correlated factors to suicide.

Males commit suicide four times more than females; however, females attempt it more often. This may be due to the means used by each sex. Males tend to use more deadly and violent means such as firearms and hanging, whereas women attempt with poisoning and overdosing on medication. There have been several risk and protective factors found that can be associated with suicide. One of the main risk factors is depression. In fact, it is estimated that 50% of all suicides occur in correlation with a primary mood disorder (Jamison, 1999). Other risk factors are having a substance abuse disorder, a family history of suicide, a family history of violence (physical or sexual abuse), having firearms in the home, incarceration, and previous exposure to suicidal behavior (Center for Disease Control and Prevention, 2007).

While suicide rates are still highest among the older population, it is the third leading cause of death for those aged 10-24 (Center for Disease Control and Prevention, 2007). The ratio of attempted suicides to completed for all ages is about 10:1, however, for this age group it is approximately 100:1 (Oltmanns & Emery, 2012). Because the topic of suicide is one with such stigma attached to it, it is a difficult death to predict and prevent due to the lack of conversation between those with suicidal ideations and those that can help. Another reason it is difficult to
predict and prevent is the low base rate. This means that many people with common risk factors for suicide do not commit it. Suicide is perhaps one of the most complex, multi-faceted, and difficult deaths to deal with, and for this reason deserves a great amount of research and attention.

One population who is in much need of help and support are the “survivors of suicide.” Survivors of suicide are those who have experienced the death by suicide of someone that they care about (Smolin & Guinan, 1993). On average, there are ten survivors for every suicide, six of these being family members. Thus, there are over 180,000 new family survivors of suicide each year (Jordan & McMenamy, 2004) and approximately five million individuals have been affected by suicide in the last decade (Cerel, Jordan, & Duberstein, 2008; Jordan, 2001). These families often have a more difficult time coping due to the death being unexpected, sometimes violent, and unnatural. There has been little research conducted to date concerning the needs and difficulties that these families have in relation to those grieving other types of death. In particular, there needs to be more research in order to better understand how to help suicide survivors cope. This review will largely examine the previous research done on the impact suicide has on the family and how bereavement differs for suicide survivors, relative to survivors of other types of death.

Another population that is not well understood concerning the topic of suicide is military families. Suicide is now the third leading cause of death in the Army. Since 2006, both the Army and United States Marine Corps (USMC) suicide rates have greatly increased, and the United States Navy rates have slightly increased. In fact, in 2008, the rates of suicide for active duty Army troops reached a 28-year high, 20.2 per 100,000, which exceeds the civilian rate (United States Army, 2010). There are no studies examining the impact of suicide on military families.
However, following this literature review, a future study will be described. In this study, Marine wives and children who have dealt with the suicide of a spouse will be interviewed to understand the impact of their loved one’s death. The study will also examine potential risk and resilience factors associated with post-suicide adjustment.

**Impact on Spouses**

The death of a spouse is ranked near the top of the list for major life stressors (Farberow, Gallagher, Gilewski, & Thompson, 1992). When a spouse commits suicide, it is common for the surviving spouse to experience guilt, blame, and shame. This increases the impact of death for the surviving spouse. Shame has been found to be related to depression and psychological maladjustment in surviving spouses (Cleary, 1992). These feelings of guilt, blame, and shame were experienced more in suicide-bereaved widows than nonsuicide bereaved widows (McNiel, Hatcher, & Reubin, 1988; Cleary, 1992). Shame is often linked with humiliation and guilt. For suicide survivors, the shame and guilt often arises from feelings of responsibility for the event. Shame and guilt both may play a role in intensifying stigma felt by these spouses (Cleary, 1992).

In a study by Farberow and colleagues (1992), 108 survivors of spousal suicide were compared with survivors of natural death to determine the differences in social support received among the two groups. It was found that increased stigma among suicide survivors appears to play a part in suicide survivors receiving less social and emotional support than non-suicide survivors.

Some other emotional reactions displayed by suicide survivors are increased anxiety, depression (Farberow et al., 1992) and lower overall life-satisfaction (Elwell & Maltbie-Crannel, 1981). Spouses reported that their lives were less enjoyable than before their loved one died. They also reported higher levels of depression and grief after the first year. While non-suicide survivors were also depressed, their depression subsided faster than suicide-bereaved spouses.
(Farberow et al., 1992). Also, the coping of suicide bereaved spouses was more complicated because of the added stigma and shame.

When a spouse dies, daily life roles are often disrupted. Married couples often develop sex-specific roles where women are the homemakers, even if employed, and they are also the source of social networking. Men are seen as the providers who provide a sense of stability and comfort. An upset in this relationship pattern can result in feelings of confusion, loss, and even depression (Stroebe & Stroebe, 1983). If there are children in the household, this disruption can also affect their lives because the surviving spouse may have difficulty providing for the needs of the children.

Some aspects of grieving that are unique to widows of suicide is their often obsessive attempt to understand and come to terms with the death. These spouses often wonder why their loved one did this and how they could have stopped it (Wallace, 1973). Men whose wives commit suicide were as much as 46 times more likely to engage in suicidal behavior (Agerbo, 2005). The finding that suicidal behavior increases with a previous suicide in the family is also seen in children. Wallace (1973) also observed that some spouses experienced relief after the suicide death, especially if the deceased was an alcoholic.

Even though there has been some evidence of relief following suicide of a spouse, the majority of the impact is negative. Again, the death of a spouse is clearly a hardship, however, when the mode of death is suicide, bereavement becomes more complicated due to feelings of shame, responsibility, and constant wonderment about the cause of the suicide. Even though death of a spouse is already high on the list of major life stressors, death of a spouse by suicide may push it up even higher.
Impact on Parents

The overall consensus of general bereavement is that the death of a child is the most distressing of all (Reed, 1993; Cleiren, Diekstra, Kerkhof, & van der Wal, 1994). The fact that suicide bereavement may be more difficult due to the unexpectedness of the loss is especially true in the case of a child suicide because of the normal progression of life through birth: live a long, full life, and then death sometime after the age of 75 (Klass & Marwit, 1988). Some of the reactions that parents have after losing a child to suicide are feelings of shame, denial of the mode of death, guilt, and anger (Rudestam & Imbroll, 1983).

Overall, parent suicide survivors experience more psychological distress than survivors of alternative types of death (Seguin, Lesage, & Kiely, 1995). Shame and inadequacy as a parent are common findings. The parents typically feel that they have failed their children in some way and question their parental competency. This perceived failure can lead to feelings of awkwardness towards close family members, feeling as if they are also judging their methods of parenting (Demi & Howell, 1991). Sometimes this fear of being judged leads to social isolation among the parents, which makes it harder for others to reach out and provide the social support that they need (Seguin et al., 1995; Demi & Howell, 1991). Another negative consequence of this shame is loss of sense of self or who they are as a person. They no longer see themselves as good parents and this may create feelings of distress, confusion and lower self-esteem (Seguin et al., 1995).

Another common reaction among parent survivors is depression, especially among mothers. In several studies of child suicide, many of the parents reported being depressed initially after the suicide, but symptoms diminished approximately six to nine months later (Brent, Moritz, Bridge, Perper, & Canaobbio, 1996; Rudestam, 1977; Seguin, et al., 1995).
Depression is not an uncommon reaction among parent survivors of nonsuicide deaths (i.e. accidental death or death by natural causes); however, there has been some evidence that suicide survivors do show higher rates of major depression for longer periods of time compared to nonsuicide survivors (Brent et al., 1996). Even if both groups are depressed, suicide survivors may have a harder time grieving because of the feelings of guilt, shame, and anger.

The Kubler-Ross model, also known as the five stages of grief, indicates that denial is the first stage of grieving (Oltmanns & Emery, 2012). Denial following a suicide has been found with the death of children. Fathers, in particular, have a hard time accepting their children’s suicide and claim that it was an accident, even when evidence points clearly to the contrary. Some fathers even become angry and hostile towards those who will not agree (Resnik, 1969). Even though denial is part of a step-by-step process in grieving, extended denial can become problematic. For example, prolonged denial can interfere with coming to terms with death and beginning to move on. Denial has been found to affect communication within the family post-suicide. Surviving spouses sometimes avoid communicating with their children about the suicide, even if the child saw or knew the cause of death (Cain, 1972).

When a child commits suicide, the parents are more often blamed more than other kinds of death. (Calhoun, Selby, & Abernathy, 1984; Range, Bright, & Ginn, 1985; Reynolds & Cimbolic, 1988). Parents have also been found to be less liked, especially when the child is younger. In a study by Rudestam and Imboll (1983) eighty adults responded to newspaper ads regarding the death of a ten-year old child either by a car accident, drug overdose, hanging, or bone marrow disease. Each person was randomly assigned an ad and was asked to fill out a survey. When the child died by a hanging, participants rated the parents as more blameworthy and said the children were more likely to come from a disturbed household. In addition, fathers
were sometimes seen as more psychologically disturbed prior to the suicide and when the suicide was violent. They were also blamed for the suicide more than the mothers.

Therefore, because of the untimeliness of the death, feelings of shame and inadequacy as a parent, stigma and guilt, and depression and denial, the impact of suicide on a parent can be highly detrimental. These survivors may be the ones in need of the most help from family, friends, and professionals; however, due to the stigma and blame associated with this untimely death, parental survivors are the least likely to take part in postvention—an intervention after a suicide (Trolley, 1993). This is unfortunate because after such a distressing life event, social support may be a key factor in regaining the survivor’s sense of self and working through the grief in an effective way.

**Impact on Children**

Each year, there are approximately 60,000 child suicide survivors in the United States (Cerel et al., 2008), with 7,000 to 12,000 experiencing the suicide of a parent (Small & Small, 1984). Child survivors have been studied the most and the findings have been widespread. Child survivors have a wide range of emotional and behavioral reactions (e.g. guilt, sadness, aggressiveness, and other behavioral problems). One common finding has been that the child can feel they are in some way responsible for his or her parent’s suicide, and thus are partly (or completely) to blame (Cain, 1972; Cerel, Fristad, Weller, & Weller, 1999; Rudestam, 1977). Self-blame among children can lead to lower perceived competence, more psychological symptoms, and more behavioral problems (Healy, Stewart, & Copeland, 1993).

In some cases, the child thought that earlier hostile wishes towards the parents or misbehavior right before the suicide were what caused the parent to complete the act. This
distortion in thinking has led to guilt, depression, obsession with the death, and rampant self-destructiveness (Cain & Fast, 1972). In some families where the surviving parent avoids communicating with the child about the death, these feelings of guilt and blame may have long-term effects because they are never talked about or negated (Rudestam, 1977; Cain & Fast, 1972).

In terms of psychological adjustment, there are typically two potential paths that the surviving children may take: the depressive route or the angry route (Cain & Fast, 1972). Child survivors of the depressive route often express feelings of loneliness and sadness. Oftentimes, the surviving parent, grandparent, or even siblings become the primary caretaker. However, if the surviving caretaker is also grief-stricken, they may be emotionally unable to provide the kind of supportive and emotionally significant relationship that every child needs (Lohan, 2002). In some cases, when grandparents were put in charge, they were too old or feeble to function as parents, while siblings put in charge may be too immature or young (Demi & Howell, 1991). Another reason why children may become depressed following a parent’s death is the formation of thoughts revolving around how traumatic the world is and how their sense of interpersonal relationship has been completely turned upside down (Brent et al., 1993). These distressing thoughts and responses have been associated with chronic symptoms of severe depression (Brent et al, 1993).

There are child survivors who take the angry route. They tend to be more anxious, aggressive, and angry after the death. Anger was usually directed either towards the deceased for leaving them, or towards other family members for their actions (e.g. negative words spoken before the suicide or acting out) towards the deceased (Demi & Howell, 1991). Some may have problems at school and symptoms of posttraumatic stress disorder (Center for Disease Control
and Prevention, 2007; Pfeffer et al., 1997). Some may become defiant and engage in marijuana and alcohol use (Cerel et al., 2008).

Another more serious consequence of experiencing the suicide of a parent is suicidal ideation and self-inflicted injuries (Brent, Melhem, Donohoe, & Walker, 2009; Center for Disease Prevention and Control, 2007; Cerel et al., 1999; Pfeffer et al., 1997; Shepherd & Barraclough, 1976). Suicidal ideation is defined as thinking about, considering, or planning for suicide. Some children identify with their suicidal parent’s impulses and believe that they are going to die in the same way (Murphy, Wetzel, Swallow, & McClure, 1969). Kuramoto and colleagues (2010) confirm this in their study of suicide-attempt following parental suicide. It was found that maternal suicide increases the risk of suicide-attempt and hospitalization among offspring, whereas paternal suicide increases risk of hospitalization due to depressive and anxiety disorders. In addition, some studies have reported that suicide survivors in general, not just children, reported higher rates of suicidal ideation, suicide attempts, and suicide completions (Crosby & Sacks, 2011).

In addition to these risky behaviors, suicide bereaved children are more likely to display symptoms of oppositional defiant disorder (ODD), conduct disorder, and cigarette use. One study even found a relation of maternal suicide and diagnosis of Bipolar Disorder when the children were 0-9 years of age (Tsuchiya, Agerbo, & Mortensen, 2005). Teachers reported these children as having more social problems at school with peers (Cerel et al., 1999). This could be due to the fact that some child survivors experience lowered self-esteem; they may have felt that they were not good enough children to their parents and, therefore, tried too hard to please others in the future (Demi & Howell, 1991).
Up to 8,000 children experience the suicide of a sibling every year in the United States. There have been very few studies examining the effects of sibling suicide, however, one study found that siblings were more likely to display new onset depression, especially if there was a family history of depression or a previous psychiatric disorder (Brent et al., 1992). Denial was sometimes used to hide the pain in sibling suicide, either denial of the mode of death or denial of one’s feelings about the suicide. This was dangerous and often led to unresolved anger towards the deceased (Demi & Howell, 1991).

While there are a handful of studies examining the impact of parental suicide on the child survivors, more research is needed to explain why some children may become angry and hostile while others are sad and guilt-stricken. The age and developmental stage of the child are also important factors to take into consideration when studying the impact. Even though there are a wide array of problems that may arise from this catastrophic event, children have a tendency to be resilient and with more information and proper interventions, they will have a better chance of overcoming this stressful life event.

**Family Reactions/Family Typology**

In the western world, society tends to emphasize the health and well being of individuals, as opposed to groups (Barlow & Coleman, 2003). So it is no surprise that the majority of the research on impact of suicide is based on individual reactions as opposed to family reactions. There are some studies that examine prior family functioning and impact on the family as a whole. It is important to look at the family functioning as a whole in order to see how the different relationships can be mediators in individual coping (Cerel, Fristad, Weller, & Weller, 2000). Families bereaved from suicide have been found to show more disturbed interactional
styles (i.e. shutdown of open communication, conflict over bereavement style differences, and disruption of relationships between the family and the larger social context) and increased disruptions of attachment compared to other families (McIntosh, 1987; Moscicki, 1995; Samy, 1995). There has also been research to show that some suicidal adults have a history of physical or sexual abuse or parental loss (Adam, 1990). Therefore, it could be possible that suicide can create dysfunction in families or simply add to what already existed.

It has been suggested that there are three types of families in which the suicide of a parent occurs: functional, encapsulated, and chaotic families (Cerel et al., 2000). Functional families are those with no preexisting family conflict or psychopathology and the suicide is usually due to a chronic physical illness. Encapsulated families are those in which psychopathology and conflict was observed in only the deceased. Lastly, chaotic families are those where psychopathology and conflict was seen in multiple family members prior to the suicide (Cerel et al., 2000). Looking at these previous conflicts may help determine the cause of suicide and enhance helpers’ capacity to assist the bereaved of the suicide (Barlow & Coleman, 2003). Chaotic families may be those families who experience marital separation, trouble with the law, or domestic violence prior to the suicide. In reviews by Adam (1990) and Blumenthal (1990), it was found that suicidal adults showed increased rates of childhood physical and sexual abuse and parental loss and deprivation. This is a clear indication that chaotic or encapsulated families are more at risk for parental suicide than functional families.

In addition to this theory, Miller, King, Shain, & Nayor (1992) suggested that suicide happens more often in vulnerable families. Vulnerable families are characterized by genetic factors (e.g. family history of depression), developmental factors (e.g. types of attachment), and environmental factors (e.g. major life events). Vulnerability may not only predict causality of
suicide but also effectiveness of coping within the family. For example, if an individual has past developmental issues, such as experiencing divorce when a child, plus a major life event (suicide) than this could explain why they are unable to respond to social support (Miller et al., 1992).

One reaction to suicide that has been studied is family disintegration (Demi & Howell, 1991). In a study it was found that child survivors of parental suicide had to become the “adults” and caretakers of the family and change their daily roles. Failure to change roles and rules may inhibit adaptation. Child survivors not only lost a parent but also an impression of life (Lohan, 2002). Traditional family rituals were disrupted and this had the survivors longing for a “normal” family even into adulthood (Demi & Howell, 1991). Another form of disintegration among the family is decreased family bonding (Olsen, Russell, & Sprenkle, 1983). Lack of cohesion among families can be seen with respect to decreased communication, support, and intimacy, as well as increased blaming of other family survivors following a suicide (Barlow & Coleman, 2003; McNiel et al., 1988). For example, in one study, participants reported being more distant from family members post-suicide (Dunn & Morrish-Videners, 1987).

While it is difficult to study pre-suicide family functioning without predicting that a suicide will occur, it is still important to examine the family typology in order to better understand causality of suicide and to help each family cope. Even though a suicide is an individual and oftentimes solitary act, it can still diminish the stability and predictability of any family’s lifestyle (Barlow & Coleman, 2003). Because of this, it is important to stray away from simply studying how one person copes with suicide; however, researchers should be focusing more on how the impact of one family member can influence the other (Cerel et al., 2008).
Social Stigma: Complicating the Coping Process

There has been a social stigma connected to suicide dating all the way back to the Middle Ages (Dunne, Dunne-Maxim, & McIntosh, 1987). When someone committed suicide, the corpse was destroyed in order to prevent any “bad spirits” from being unleashed. The bodies were usually in so badly destroyed that the families could not even have a proper burial to say their goodbyes and gain a sense of closure (Dunne et al., 1987; Jobes, Luoma, Hustead, & Mann, 2000). In medieval Europe, primitive rituals and taboos against suicide were adopted and suicide was often viewed as an official sin against God that was punishable. However, since the ones who committed this sin were already dead, the relatives had to receive the punishment (e.g. loss of property and tainted reputations). This kind of shame led to the beginning of secrecy about suicide; families had to lie about the cause of death in order to avoid being treated this way (Jobes et al., 2000).

By the 19th century, survivors were no longer blatantly punished for a suicide in the family; however, they received a different type of stigma. Suicide was often linked to insanity and it was claimed that insanity was a genetic factor. Therefore, any relative of a suicide victim was seen as mentally ill and more vulnerable to this type of death (Jobes et al., 2000). Eventually this belief declined, but there is still a great amount of stigmatization attached to suicide today that makes the impact on families all the harder.

Stigma is “manifested by bias, distrust, stereotyping, fear, embarrassment, and/or avoidance of the stigmatized individual or group.” (USD-HHS, 1999). There is overwhelming evidence social stigma targeted at suicide survivors makes their bereavement much more difficult (Bailey, Kral, & Dunham, 1999; Calhoun & Allen, 1991; Demi & Howell, 1991; Fraser 1994; Jordan, 2001; Kneiper, 1999). The stigma experience includes being avoided by others,
judged more negatively, less liked, and more blameworthy. Sometimes this kind of stigma drives people away from the survivors, leaving them in social isolation, with less people to talk to about the death and feelings of loneliness and depression (Jordan, 2001).

Sometimes this stigma is not actually there, but because suicide is taboo in our society, survivors may expect to be stigmatized and take part in a process called self-stigmatization (Dunn & Morrish-Videners, 1987). This is when people expect to be harshly judged and disliked by others, so they purposely avoid contact with their social networks. Unfortunately, our society is not well structured or prepared to respond effectively to the emotional and social needs of these deprived people. People are never formerly taught how to help someone cope with a suicide, therefore, they may think that giving no support is better than giving, what they may perceive as, negative support. So when the survivors isolate themselves, social networks may take this as a sign to stay away. As a result, it is a vicious feedback loop between the survivors and the others (Dunn & Morrish-Videners, 1987).

**Social Support as a Protective Factor in Coping**

Social support can be a positive mediating variable in coping with bereavement; in fact, it tends to be a crucial factor in predicting bereavement outcome in any type of loss (Stylianos & Vachon, 1993). Establishing healing partnerships after a suicide can increase personal stability and restore the entire family’s health post-suicide (Barlow & Coleman, 2003). It has also been found to alleviate separation anxiety, feelings of rejection, and depression among those suddenly bereaved (Reed, 1998). In one study, bereaved spouses who discussed their feelings with others about the suicide had fewer health problems within one year than those who kept to themselves. In addition to this finding, survivors in closer families and those who received open support had
lower levels of overall grief (Farberow, Gallagher, Gilewski, & Thompson, 1992). On the other hand, those who lack or have poor social support have been found to have a more difficult time coping than those with it (Barlow & Coleman, 2003; Worden, 2002). In one study with suicide survivors, those who never talked about the suicide with someone prior to the interview expressed more anger and guilt and less relief than those who had talked about it (Rudestam, 1977).

Giving positive social support to a suicide survivor may be a difficult task. Many people do not know what the “right” thing to say to suicide survivors after such a distressing event and may simply avoid the bereaved (Wagner & Calhoun, 1991). The fear of giving negative support or advice also leads some to avoid the survivors (Seguin et al., 1995; Thompson & Range, 1992). When survivors are isolating themselves as a result of avoiding stigma, they are in turn making it more difficult for others to give their support and may be sending mixed messages. Even if they have and want people who love and care for them and want to be there in this time of need, this self-isolation says differently (Thompson & Range, 1992; Trolley, 1993; Wagner & Calhoun, 1991).

Coping with suicide is complex and confusing. Survivors are not only dealing with the loss of a loved one, but also role changes, stigmatization, guilt, caring for other family members, and much more. They need all the help they can get. The fact that there are studies supporting the effectiveness of social support as a mediating variable in coping should be known by all, so that even if they feel awkward or worried of saying the wrong thing, they will know that just being there with the survivor is better than not.
Other Risk and Resilience Factors in Coping with Suicide

A number of other factors can either help or hinder one’s coping with suicide. Being resilient is defined as the ability to react positively when a threatening event occurs (Seguin et al., 1995). Risks are defined as characteristics of family and environment, which hinder families from successfully coping with difficult situations (Cohler, 2000). While there are not many studies examining the specific risk and protective factors of adjusting to post-suicide loss, there are studies examining pre-suicide family functioning and how this may predict post-suicide adjustment (Cerel et al., 2008). Research suggests that a family history of dysfunction (e.g. marital separations, substance abuse, relational violence, sexual abuse) that is present before the death may thwart resilience and add to grief symptoms (Cerel et al., 2008). This same dysfunction can lead to poor family adjustment or increased potential for suicidal thoughts after the loss (Jordan 2001).

A helpful way to understand the impact of suicide is by using the Loss-Resource Model (Mishara, 1995). His model suggests that the overall impact of the loss is determined by the magnitude of the loss and the available resources to cope with it (e.g. social support). Magnitude is determined by the relationship between the bereaved and the deceased, looking at kinship relationship, frequency of contact, intimacy, ambivalence, and proximity in the relation. However, he also states that even if there are rich, instrumental resources available to the bereaved, but they have little faith in their ability to adapt to this new situation (poor adaptational resources), then there is a greater chance of poor outcomes. A major indicator of adaptation is confidence of the bereaved that they will be able to deal with the loss. This confidence is also related to low level of depression at both four and 14 months after the loss (Cleiren, 1993).
Secrecy

The development of secrecy about the cause of death, especially when children commit suicide, is not uncommon (McIntosh, 1987). This dates back to the 18th century when survivors were punished for the suicide and, therefore, decided to blame the death on accident or insanity (Dunne et al., 1987). This secrecy continues to the present day to avoid being stigmatized by society. Many parents feel that they are protecting their children by failing to disclose what actually happened, however, this can actually have long term effects on the psychological development of all family members. For example, in one family, the surviving spouse decided not to tell his youngest son about the death, but the other siblings knew. They were forced to go through life hiding this fact to protect their brother and tension and resentment towards their father slowly built up (Barlow & Coleman, 2003). Some families may take it to the extreme and leave town completely or threaten their children not to tell anyone of the suicide. Maids, gardeners, and housekeepers were let go because they knew. This avoidance resulted in lack of cathartic therapy, loss of opportunities to relieve guilt, and distortions of reality (Cain, 1972).

Limitations

As stated previously, survivors of suicide have not been studied as nearly in depth as other aspects of suicide (e.g. predictors of suicide, associations between suicide and mental disorders). The studies that have been reviewed have several limitations. Most of the sample sizes were very small, too small to be considered representative to the larger population. However, it is understandable to see how it can be difficult to recruit enough participants to take part in a subject that may be too hard for them to discuss. Nonetheless, in order to better understand how families cope with suicide, studies with greater sample sizes are needed.
Another limitation is that the majority of studies about this topic are outdated (e.g. studies from the 1960s, 1970s, and 1980s). By referencing these studies, it makes information less credible. Research methods and study designs have changed drastically, the stigma of suicide has changed, and the availability of resources to those bereaved has increased. Much of the information gathered from these studies may be invalid due to all of these differences affected by time.

There have been very few studies examining the impact of suicide on the family as a whole. Many of the studies simply looked at how spouses alone are affected or children alone. It is important to find out how the family influences each other during this time of coping. Looking at how the family interacted before the suicide is another important factor to consider when studying post-suicide outcomes. There are very few studies examining this as well. However, it is very hard to identify pre-suicide family functioning because all of these studies have to be retrospective; one cannot simply predict that a spouse or parent will kill him or herself; it usually comes as a shock. Because it is impossible to go back into time and observe how these families interacted before the suicide, researchers have to go by what each member recalls - which may be problematic due to lies to cover up negative interactions, failing to remember how they interacted, or different perspectives from each member.

One large limitation concerning this topic is the lack of research on how military families cope with suicide. This is an important limitation to point out because of the increase in military suicide since Operation Iraqi Freedom/Operation Enduring Freedom (OIF/OEF) began in 2003 (Shineski, 2010). These families already face unique hardships such as deployment, constantly moving, and dealing with the constant fear of something detrimental happening to a loved one while he or she is overseas. Therefore, it would be interesting to discover how suicide impacts
these unique families and what risk and protective factors may help them specifically when coping.

**Suicide in Military**

Since the beginning of Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF), military suicide rates have been increasing. In 2008, among active-duty Army troops, the age-adjusted suicide rate hit a 28-year high, of 20.2 per 100,000 (United States Army, 2010). The overall suicide rate among 18-29 year old male veterans increased by 26% between 2005 and 2007 (Shineski, 2010). Figure 1 gives a more comprehensive look at military versus civilian suicide rates. This figure includes suicide rates for the non-adjusted civilian population, adjusted civilian population based on United States Navy (USN) and United States Marine Corps (USMC) demographics, and USN, USMC, and Army rates for the past 11 years. This figure suggests that since 2006, both Army and USMC suicide rates have increased while the civilian rate remained fairly stable. The United States Navy showed a slight increase. From 2001 to 2007, the Army suicide rate per 100,000 doubled and between 2006 and 2009, the USMC rate doubled as well. This is an interesting finding because these two branches of the military consist of the majority of ground combat troops serving in OIF/OEF.
Figure 1: Military and Civilian Suicide Rates

![Figure 1: Military and Civilian Suicide Rates](image)

Table 1 takes a closer look at the prevalence of suicide within each branch of the military.

Between 2000 and 2009, the Navy saw an eight percent increase in number of suicides, the USMC had a 54 percent increase and the Army showed a 64 percent increase during the same time period.

Note: Full citations are provided in the reference list.

- a Centers for Disease Control and Prevention, 2007
- b Department of the Navy, 2009
- c United States Marine Corps, 2010
- d United States Navy, 2010
Table 1: Table of Military Suicide

<table>
<thead>
<tr>
<th>Year</th>
<th>USN^a</th>
<th>USMC^b</th>
<th>Army^c</th>
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<tbody>
<tr>
<td>1999</td>
<td>39</td>
<td>27</td>
<td>---</td>
</tr>
<tr>
<td>2000</td>
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<td>24</td>
<td>58</td>
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<td>2001</td>
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<td>42</td>
</tr>
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<td>2002</td>
<td>45</td>
<td>23</td>
<td>74</td>
</tr>
<tr>
<td>2003</td>
<td>44</td>
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<tr>
<td>2009</td>
<td>46</td>
<td>52</td>
<td>160</td>
</tr>
</tbody>
</table>

Note: Full citations are provided in the reference list.
^a Department of the Navy, 2009; United States Navy, 2010
^b Department of the Navy, 2009; United States Marine Corps, 2010

A few studies have examined the increase in military suicide (Jakupcak, Cook, Imel, Fontana, Rosenheck, & McFall, 2009; ). The role of PTSD and combat trauma has been found as a link, as well as co-occurring psychiatric disorders (Jakupcak, et al, 2009; Kang & Bullman, 2008). In order to be diagnosed with PTSD, the individual must re-experience the trauma (either through distressing dreams, disturbing thoughts, or intense reactivity to any sort of reminders of the event), as well as symptoms of avoidance and numbing (i.e. restricted range of
affect or inability to remember some parts of the trauma), and persistent hyperarousal (i.e. sleep disturbances and agitation/irritability) (American Psychiatric Association, 2000). Returning OEF/OIF war veterans were four times more likely to have suicidal ideations than those without PTSD (Jakupcak, et al 2009). In fact, suicide is more common for PTSD victims than of any other anxiety disorder (Galovski & Lyons, 2003).

Another reason returning veterans could be at risk for suicide is exposure to violence and consequent habitation to pain. Soldiers are more likely to witness, experience, and become engaged in more violence than others, which leads to getting used to pain and provocation. Habituation to pain and subsequent acquired ability to combat exposure (i.e. being used to fighting others with violence), coupled with postdeployment sense of failed/thwarted belongingness and/or burdensomeness, place veterans at increased risk for suicidal behavior (Joiner, 2005). Feelings of burdensomeness can be made by postdeployment job loss and inability to provide for the family financially. There may also be a sense of lack of social belongingness among returning veterans because their friend and families have not gone through and cannot understand their combat and war experiences. This sense of alienation can lead to marital and family problems and eventually, to suicidal ideation or attempts (Selby, et al, 2010).

Impact on Military Families

By the autumn of 2010, more than 2.1 million service members, almost half of them parents, had deployed to support Operation Enduring Freedom and Operation Iraqi Freedom (Lester, 2012). Based on the fact that there are eight to ten survivors for every suicide, it is estimated that there are 17,000 Marine Corps, Army, and Navy family members impacted by a suicide of a loved one. Military families definitely experience their own kinds of stressors that
are unique from civilian families. They have to deal with deployment and being separated from their loved ones, moving around a lot, and sharing the responsibilities of the spouse when he or she is away on deployment. When a family member does get deployed, the constant worry about his or her safety and a potential loss for the family becomes a common cognitive theme (Lester 2012). One can only imagine the hardship and traumatic experience of dealing with a suicide of a military family member, on top of all of these prior stressors.

In the interest of studying impact of suicide on military families, a conceptual model of post-suicide family functioning based on risk and resilience factors has been made by Dr. Keith Aronson and will be put to the test with a sample of USMC suicide surviving spouses. This model draws from theory and research from the fields of human development and family studies, clinical psychology, and military psychology. There are four main clusters, which are predicted to moderate the relationship between the suicide and family outcomes (See Figure 2).

The first cluster is pre-suicide family functioning, with the three elements being cohesion, warmth, and communication. The second cluster is the pre-suicide mental health of the individuals within the family. This cluster is somewhat akin to Cerel’s theory of family typology prior to suicide (functional, encapsulated, and chaotic). The chaotic families were the ones with previous conflict and psychopathology within multiple family members was observed. It has also been found within military spouses that health and well being is a strong predictor of family functioning during challenging and stressful times, like deployment and relocation (APA Presidential Task Force on Military Deployment Services for Youth Families and Service Members, 2007; Chandra, 2011; Chartrand, 2008; Drummet, 2003). The third cluster is pre- and post- suicide attitudes and beliefs- including religious beliefs and participation in organized religious activities as well as attitudes towards the military. The fourth and final cluster is
openness to and availability of social support post-suicide. Research has shown that social support is a positive outcome predictor in post-suicide adjustment. See Figure 2.

<table>
<thead>
<tr>
<th>Pre-Suicide Assets</th>
<th>Post-Suicide Risk/Resilience Mediators</th>
<th>Family Outcomes</th>
</tr>
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<tbody>
<tr>
<td>Family Functioning:</td>
<td>M I L I T A R Y S U I C I D E</td>
<td>Social Support:</td>
</tr>
<tr>
<td>a. cohesion</td>
<td></td>
<td>a. openness to support</td>
</tr>
<tr>
<td>b. warmth</td>
<td></td>
<td>b. perceived availability of support</td>
</tr>
<tr>
<td>c. communication</td>
<td></td>
<td>c. proximity to support</td>
</tr>
<tr>
<td>d. routines</td>
<td></td>
<td>d. engagement of support</td>
</tr>
<tr>
<td>Surviving Spouse Functioning:</td>
<td></td>
<td>a. stress</td>
</tr>
<tr>
<td>a. psychological symptoms</td>
<td></td>
<td>b. coping capacity</td>
</tr>
<tr>
<td>b. parenting satisfaction</td>
<td></td>
<td>c. resilience</td>
</tr>
<tr>
<td>c. physical health</td>
<td></td>
<td>d. thriving</td>
</tr>
<tr>
<td>Attitudes &amp; Beliefs:</td>
<td></td>
<td>e. healthy lifestyle</td>
</tr>
<tr>
<td>a. religiousness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. pro-military &amp; military mission sentiments</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 2: Conceptual Model of Post-Suicide Family Functioning

The hypotheses for this study are that families with (a) greater pre-suicide individual and family health and well being, (b) greater religiosity, (c) positive regard for the military and the
mission, and (d) social support will be positive predictors for resilience, positive coping, and the health behaviors after the suicide of the Marine. It is also predicted that families with greater resiliency characteristics prior to and after the Marine suicide will more likely be resilient (returning to their baseline level of functioning) or thrive (surpassing their baseline level of functioning) post-suicide.

**Future Study**

This will be the first study to examine the post-suicide adjustment and needs of Marine spouses and families. Spouses of Marines who committed suicide in 2010, 2009, and 2008 will be interviewed for 30 minutes over the telephone about their pre-suicide well being, family functioning, and attitudes and beliefs towards the military and religiosity. They will also be inquired about their current personal and family health, well being, coping, and resilience. By examining these measures, the validity of the proposed conceptual model of post-suicide family functioning will be tested. The reason for studying three separate time period cohorts (2010, 2009, and 2008) is to examine the effect of time passage on the post-suicide adjustment and well-being.

This study will also be assessing the degree to which surviving military spouses are familiar with military and community services and supports for those bereaved by suicide and traumatic loss. Many suicide survivors report needed professional assistance in coping with the suicide, however, social stigma, shame, and lack of knowledge of available resources may prevent them from obtaining this help (Provini, 2000). Only about 50% of the survivors who need professional help actually seek it out (Jordan, 2011). Some turn to social support, but evidence from the literature review states that many people do not know what to say, give bad
advice, or receive mixed messages from the survivors about their desire for social and emotional support. This information gained from the interviews with Marine spouses about their knowledge of support services will be valuable for the Marine Corps, Department of Defense, and policymakers who are in a position to bolster the availability of evidence-based programs to military family survivors of service member suicide.

Lastly, this study will also inquire about any signs or signals that the participants observed and could have potentially been warning signs. There are no published studies pertaining this information, however, this kind of information can be helpful to other military or civilian families who can look for these warning signs within their own families.
References


Health Values, 16, 47-54.


Jobes, D., Luoma, J., Hustead, L., & Mann, R. (2000). In the wake of suicide: Survivorship and


Katherine Davis  
818 Bellaire Ave  
Apt. # T214  
State College, PA 16801  
Ked199@psu.edu

Education:  Bachelor of Science Degree in Human Development and Family Studies  
Minor in Spanish  
Honors in Human Development and Family Studies  
Thesis Title: The Impact of Suicide on Family Survivors: A Review of the Literature and Proposal for Future Study  
Thesis Supervisor:  Dr. Keith Aronson, Ph. D.

Related Experience:  
- Internship with the Penn State Clearinghouse for Military Family Readiness  
  Fall 2010-Winter 2011
- Research Assistant for Strengthening Families Program  
  Spring 2010
- Research Assistant for Siblings Are Special Program at Penn State Prevention Research Center  
  Fall 2010-Spring 2012

Activities:  
- Mission Work in Ghana, Louisiana, and Arkansas  
- Friendship Group Coach  
- English as a Second Language Tutor  
- Volunteer at Mount Nittany Medical Center  
- Volunteer at Allied Health Rehabilitation Hospital