

Is familicide a distinct subtype of mass murder? Evidence from a Swiss national cohort

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Abstract

Background: Familicide is defined as the killing of a whole family and, numerically, a form of “mass murder” (more-or-less three simultaneous killings). Switzerland has a lower rate of homicide than most other countries but a comparatively high share of homicides within the family.

Aim: The aim of this study is to describe a complete national sample of familicides and compare them with other types of mass murders in the country over the same period.

Methods: All cases of three or more unlawful homicides in one event in Switzerland between 1972 and 2015 were identified from court records and socio-demographic, criminological, and psychological variables were extracted. Given small numbers, we rely on narrative comparisons.

Results: There were 20 familicides in the 43-year study, with 82 victims between them as well as six felony-associated mass murders accounting for 19 victims and nine public mass murders with 44 victims. Only one familicide was a woman; mean age was 39.5 years (range 19–57 years). Most were in employment. Only four had a prior psychiatric history. Nine had a history of violent or intrusive behaviour, but a prior criminal conviction was rare. In all but one case there was evidence of psychosocial stressors; eight men were facing separation from a spouse. Just over half used guns, but only three used army weapons. The main difference between the familicides and the other

mass killers was the much higher rate of suicide among the familicides.

Conclusions: Familicides in Switzerland appear to be rare suicidal acts, generally carried out by previously successful and apparently stable middle-aged men with often an inconspicuous psychiatric history or criminal record, differing considerably from other groups of mass killers. Expert responses, like the recently established multidisciplinary “threat management boards” in Switzerland, should bear in mind that the likely competent men involved may be good at covering their intent even from themselves.

1 | BACKGROUND

1.1 | Mass murders and familicides

The term mass murder (Bruch, 1967) is generally used to differentiate between multiple homicides that occur at about the same time and space during the same episode of violence from spree and serial killing when the homicides happen over a period of time and /or on separate occasions. Beyond that, the definition is somewhat arbitrary, but a minimum of four homicides in the same episode is now generally accepted (Fridel, 2017). According to Taylor (2018) and contrary to public opinion, mass murderers, as a rule, are not “crazy strangers”; they usually kill acquaintances following a traumatic incident or after experiencing long-lasting relational, financial, or mental health issues. Whether or not this is the case, they clearly do not form a homogenous group.

Ever since Dietz's (1986) classic paper where he distinguished between “family annihilators,” “pseudocommandos,” and “set-and-run-killers,” there have been attempts to classify mass murders into different groups.

Fridel (2017), having examined 258 people in the United States who had killed four or more people in a single episode between 2006 and 2016, proposed three categories, namely, “familicides,” characterised by the relationship between perpetrator and victims; “felony mass murders,” characterised by the motive of the perpetrator, mainly material gain and elimination of witnesses; and “public mass murders,” characterised by the location of the crime. Among the latter were different types of perpetrators such as school shooters, workplace annihilators, individuals with psychosis, and hate criminals.

Familicide is, according to Wilson, Daly, and Daniele (1995) and Liem and Koenraadt (2008), the killing of a spouse and one or all children of a family. In rare cases, the perpetrator may be a sibling and the victims the parents, and maybe other siblings too. Familicides usually occur in suburbs or rural communities with close family ties (Fridel, 2017). According to Duwe (2017), the rarest form of mass murder, public mass murder (12%), attracts the most public attention; whereas familicides are actually the most frequent form of mass murder (47%).

It has been suggested that there are two distinct types of familicides with different contextual factors precipitating the crime. In some cases, the children are chosen because they are regarded as extensions of the primary target, the estranged wife, against whom revenge is sought. Such motives might be called “hostile” (Liem & Reichelmann, 2014; Wilson et al., 1995) or referred to as “murder by proxy” (Fox & Levin, 1998; Frazier, 1975). Other perpetrators might believe that only they are able to support their loved ones and satisfy their needs. If this romantic notion is threatened by divorce or dismissal from work, murder becomes the ultimate form of regaining control over the

family, and the despondent perpetrator might commit “suicide by proxy” (Frazier, 1975; Liem & Reichelmann, 2014) and kill their kin out of “loyalty” or a distorted kind of love in order to release them from, what they feel, unbearable pain (Fox & Levin, 2014).

According to a literature review of familicides (Karlsson et al., 2019), perpetrator age may be between 35 (Wilson & Daly, 1997) and 43 years (Wilson, Daly, & Daniele, 1995); between 31% (Hamilton, Jaffe, & Campbell, 2013) and 41% (Liem & Koenraadt, 2008) of perpetrators are unemployed; and between 13% (Logan, Walsh, Patel, & Hall, 2013) and 45% (Friedman, Hrouda, Holden, Noffsinger, & Resnick, 2005) have a history of psychiatric treatment. Firearms were used in about a quarter of the small number of cases in Wales (Wilson Daly, & Daniele, 1995), but in nearly three-quarter of the cases in the United States (Liem, Levin, Holland, & Fox, 2013). About half of the perpetrators also completed suicide (Karlsson et al., 2019).

In an earlier study of a complete national cohort of mass killers in Switzerland (Ilic & Frei, 2019), we found a high prevalence of mass murders within the family compared with other reporting countries. In this study, therefore, our aim was to extend understanding of familicides by comparing their characteristics with those of other mass murderers in the country over the same period.

2 | METHODS

2.1 | Ethics

The Ethics Committee of Northwest/Central Switzerland for medical research granted permission for this study, including permission to use personal data of people no longer able to consent.

2.2 | Definitions and design

We defined familicide as any act of killing three or more people within one family, bringing the definition in line with that of “mass murder” (Ilic & Frei, 2019), thus including the killing of spouse *and* children, but not excluding the killing of children by the mother or the killing of parents and siblings by the children as has been suggested by Fridel (2017). We did exclude killing of a spouse alone, a single child, and, indeed, any single person killings. We also excluded killing of one member of a family if a bystander or bystanders had been coincidentally killed.

With assistance of the Federal Office of Statistics, we were able to identify 49 cases of mass murder, which had occurred since 1972 in Switzerland and which satisfied our definition. After receipt of Ethics Committee approval, we asked the local authorities (District Attorney's office, district courts, and correctional services) for access to the respective files. In the case of a so-called extraordinary death, especially in connection with a suspected felony, all local authorities have the duty to examine the victims through an Institute of Legal Medicine. If the offender survives, he will be prosecuted; offenders of violent crimes like these are invariably examined by a forensic-psychiatric expert whose extensive report includes advice about the offender's mind and his legal capacity.

We developed a data extraction sheet containing the following variables: socio-demographic (age, sex, and nationality), criminological (crime scene, former criminal and police records of the perpetrators, stressors, lethal instruments, type of perpetrator, threats, and victims), and psychological variables (suicidal symptoms, psychiatric history, and psychiatric diagnosis). We classified motives as “revenge” for a hostile attack at least in part as a perceived retaliation for an actual or perceived sleight, “loyalty” when the killing had appeared to be a despondent response to perceived threats to the family and the term “psychotic” for seriously mentally disturbed perpetrators. Diagnoses according to International Classification of Disease-10 were taken from the medical reports and/or from psychiatric examination of surviving perpetrators contained in the files. All data were extracted on site, and no personally identifiable material removed from the court offices. Interrater reliability was checked by rating cases

separately and blind to each other before reviewing the ratings and coming to consensus. Data on mental and behavioural disorders were primarily taken from forensic expert reports.

2.3 | Data analysis plan

Given the small sample sizes, we relied on descriptive comparisons only.

3 | RESULTS

Thirty-five mass killings were identified as having taken place in Switzerland between 1972 and 2015. Among these were 20 cases of familicide.

3.1 | General characteristics of the familicides

Nineteen of the 20 familicide perpetrators were male, only one was female. Their average age was 39.5 years (range 19–57 years). Sixteen of them were Swiss citizens; one was a European Union national; and three were from outside the European Union.

Most perpetrators were well established in society to the extent that most were in paid employment. Only three perpetrators were unemployed at the time of the incident, two were bank managers, seven were white-collar workers, four were blue-collar workers, two were farmers, one was self-employed, and one was a student.

3.2 | Criminological variables of the familicides

In all but one case, the crime scene was the family home. Three families were living in an urban environment, seven families a suburban, and 10 families a rural one.

Nine of the 20 perpetrators had a criminal record of violence, five exclusively within the home, one inside and outside the home, one outside home only, and one for cruelty to animals; a further man had a criminal record for sexual harassment, as well. One further man had a criminal record for fraud. Thus, half of the perpetrators had no previous record of violence or criminality.

3.3 | The familicide victims

Altogether, 82 people, a range of three to four per case, lost their lives: 14 of the 20 perpetrators died by suicide—the one female perpetrator and 13 of the men. Among the 24 adults who were killed by the perpetrators, five were male and 19 female; among the 44 child victims, 22 were boys and 22 girls. A further seven victims were injured; two of the perpetrators tried and failed to kill themselves; the other five were victims of two “atypical” familicides, one of which was a “bifurcated mass murder” (Meloy et al., 2004) in which the offender, a deeply indebted self-employed craftsman, initially killed his wife and two children and 2 days later met and shot one and wounded another two of his creditors. The other case was a heavily inebriated young man who set fire to his parents' house, in which his parents and two siblings died and three other siblings were injured.

3.4 | Prior threats

In over half of the cases (13/20), there had been no apparent warning of the event. In the remaining seven, threats had been documented in a service with potential for intervening. Some examples are as follows:

- A 31-year-old man had been charged with an offence of domestic violence against his wife. When she told him she would withdraw her complaint, the man hoped she would refrain from divorce, but this was not so. In the following quarrel, the man strangled his wife and his two children. Later, he reported the situation to the police, claiming total amnesia due to severe alcohol intoxication.
- The wife of an unemployed man in his 30s had several times sought shelter in a house for battered women; she was about to leave her husband, who had already a criminal record for domestic violence against his former wife, responded by axing to death her and his two stepchildren.
- The 27-year-old single mother of three children was about to lose her apartment because of financial problems. She had told relatives about suicidal ideas, and they informed her community social services. A meeting was arranged, but before this could happen, the women gave her three children sleeping pills crushed in syrup, dragged them to her car in the garage and gassed them all together there.
- The wife of a middle-aged man had an affair, which she acted out quite openly. The man made a suicide threat, and the police intervened and confiscated his gun. The couple visited a marriage counsellor, but the wife continued dating her lover. One evening, when the wife was meeting her lover, he plied his children with antidepressants and strangled them before knifing himself; only he survived.
- A middle-aged foreign resident was on sick leave for some time and feared his insurance would stop paying. His mental state deteriorated, and he was sent to a mental hospital by his family doctor. He spoke openly about extended suicide, to include his family, but he was allowed to sign himself out of the clinic. One week later, he shot his wife and two children with his gun.
- A 44-year-old farmer had been arrested for molesting his own children. As he had previously threatened his estranged wife, he was examined by a forensic psychiatrist, who found no serious psychiatric condition but recommended that all three weapons in the man's possession be confiscated after release from remand. This was done. Four months later, the man illegally acquired another gun and shot his wife, brother, sister-in-law, and the social worker in looking after his wife.
- A 19-year-old man was still living with his parents on their farm. Three weeks before the incident, he was suspected by a private person of arson, but no criminal charges were brought. Some days later, during a quarrel about money, he threatened his mother that he would burn their property. On the day of the incident, he came home heavily alcohol intoxicated after visiting bars and fell asleep. When he awoke, still drunk, he set the stables alight. His parents and three of his siblings died in the fire, and three others were injured. Two hours later, he was arrested by the police who found a blood alcohol level of 1.45–1.52 per ml.

3.5 | Motives of the familicides

In nine out of the 20 cases, we got evidence from the files that the wife of the perpetrator was about to leave the family and that the motive was judged to be revenge. In seven cases, it appeared that the perpetrator had been despondent because of economic hardship and decided not to leave this world without his next of kin. An example of the latter was a husband and wife who had left suicide notes in which they expressed their will “to leave this hostile world” and not to “abandon” their two children.

In three cases, the offenders were suffering from a psychosis and had recently been discharged from a psychiatric hospital or were on leave.

It is unclear what the drunken young man intended, but probably to kill anybody.

3.6 | Means of killing of the familicides

Guns were the weapon of choice in just over half the cases; three men used army weapons, which they, as ordinary conscripts of the Swiss militia, had retained at home, whereas eight used guns of which they were the primary owners, registered as such in seven cases. Four perpetrators strangled all their victims, whereas two used a hammer; exhaust gas, a knife, and arson were used in one case each.

3.7 | Social stressors

All but one of the perpetrators had been experiencing serious problems in relationships that were important to them. In nine cases, the problems were with a spouse or partner, with an impending separation, four perpetrators had problems at their workplace alone, and four suffered from family and professional turmoil.

3.8 | Psychological variables of the familicides

Suicide-related behaviours affected all but one of the perpetrators—the young man who burned his family home. Fourteen of them died with their victims, and two more attempted suicide. One of the latter later succeeded in killing himself in prison. Twelve perpetrators, including three who did not obviously attempt suicide, had left personal notes or diaries in which they expressed suicidal ideas.

Psychiatric diagnosis was the most difficult variable to establish, as so many perpetrators had taken their lives and not all had been in contact with services before the killings. Only three perpetrators had been in psychiatric inpatient treatment before the incident, all of whom had been suffering from a disorder within the schizophrenia spectrum; one additional person was in outpatient treatment for social phobia. In all these cases, however, the treatment was proximate to the subsequent killings.

- One was discharged from inpatient care 57 days before the killings and had been seen by a psychiatrist 23 days beforehand.
- One offender had been discharged from inpatient care 5 days before the killings.
- A young man had been hospitalised for 2 months due to a first episode of paranoid schizophrenia. On his first weekend leave to his family, he killed his family with his army rifle, which he had retained after his conscription.
- The 37-year-old white-collar worker was found unfit for military service as a conscript for psychological reasons. Married and a father of two children, he had been in psychiatric treatment for years. Weeks before killing his family and himself, he complained about “noise” in his environment and even left a note about his complaints.

All six perpetrators who had survived were assessed by forensic-psychiatrists and hence got a diagnosis. Three of them were described as suffering from a personality disorder, one from schizophrenia spectrum disorder, one from intellectual disability, and only one was found not to suffer from any psychiatric disorder.

Altogether, in 12 out of 20 cases, no psychiatric diagnosis could be established before or after the events.

3.9 | Comparison with other mass murders in Switzerland

Other kinds of mass murders in Switzerland were less frequent than familicides—seven cases were felony-associated and nine cases were public killings. The means of killing were as diverse among felony-associated mass murders as with familicides, but with one exception, a man who used a car as a lethal weapon, public mass killers invariably used a gun.

Age of the perpetrators was similar across groups, generally between 30 and 40 years, with the young drunken familicide and the psychiatric patient on his first leave from the clinic as outliers. The mean age of felony-associated mass killers was 33 years, and the mean age of public mass killers was 38 years compared with the familicides of 35.5 years. Felony-associated and public mass killers appeared more likely to have been born and raised outside Switzerland—although numbers were small. Just three of the six felony killers and four of the nine public mass killers compared with 16 of the 20 familicides were Swiss citizens. There were differences in employment status too. No felony killer had higher educational qualifications or a profession. The public killing perpetrators were more diverse—three with a disability pension, two unskilled workers, one white-collar worker, one public servant, and one self-employed professional.

Numbers of victims per killer were similar to the familicides for the felony-associated mass murders (three to four per person) but occasionally much higher for the public place killers with an average of 4.9 per case but range 3–14.

In all felony-associated mass murders, the motive appeared to be the elimination of witnesses. Public mass murders had a more diverse range of motives—more akin to the familicides, with revenge/hate particularly prominent among workplace annihilators, but also some psychosis.

The major difference between familicides and other mass killers was in suicide-related behaviours. Although all but one of the 20 familicides had been suicidal and 15 of them died by suicide, none of the felony-related mass killings was associated with suicide, and only three of the nine perpetrators of public shootings died by suicide at the scene, although a further one was killed in action and another survived a suicide attempt but remained seriously disabled.

With all surviving perpetrators, a forensic psychiatric assessment was performed, in two spectacular cases of public killings where the perpetrator did not survive, a psychiatric autopsy was ordered, another had been released from a psychiatric clinic a fortnight before the event, and with the last the questioning of next of kin gave a clear clinical picture. Hence, in cases of felony-associated and public mass killings, establishing presence or absence of an unequivocal psychiatric diagnosis was generally possible.

Unlike the family homicides, there was no psychosis in the felony-associated mass killer group. Three were described as suffering from a personality disorder, and for the other three, no psychiatric diagnosis could be established. By contrast, the public mass killer group was apparently a more consistently psychiatrically disordered group than the familicides, although this may be partly explained by the richer information available about their mental state, with proportionately more survivors and psychiatric autopsy for those who died. In six cases, a schizophrenia spectrum disorder was diagnosed, in one case, an affective illness, and in the remaining two, a personality disorder.

4 | DISCUSSION

Although we had the advantage of a complete national sample of people in Switzerland over the 43 years between 1972 and 2015, we identified only 20 familicides and much smaller numbers of felony-related and public mass killings, so statistical comparisons between groups were largely precluded. Nevertheless, findings were indicative of some important differences between the groups. The most striking was in the high suicidality of the familicide group.

Among the familicide group, we could not confirm Markwalder and Killias' (2012) assumption about the relationship between the high prevalence of households with a gun or an army weapon, respectively, and the frequency of familicides in Switzerland. Even though the share of firearms in general among lethal instruments was high, that of army weapons was not. This could partly be explained by the fact that seven of the perpetrators of familicide had no access to Swiss army weapons: four were foreigners, two were not members of the Swiss army for medical reasons, and in one case, mentioned above, the police had removed all his weapons after serious threats against his estranged wife.

Perhaps of most importance is the question whether, anything other than firearms, controls might have been done to prevent these tragedies. In seven familicide cases, there were signs of impending danger to the victims, but only in two cases did social, health, or criminal justice services intervene. It might have been expected that familicide cases in particular might have had a precursor in domestic violence, but this was not generally the case. In fact, this does fit with Belfrage and Rying's (2004) conclusions that former domestic violence is a poor indicator for later spousal killings.

Familicide and suicide of the perpetrator were so closely linked in our study that it adds evidence that familicide should generally be considered as a subclass of extended suicide or murder–suicide according to Marzuk, Tardiff, and Hirsch (1992). Our finding that only four of the 15 perpetrators who took their own lives (14 at the scene) had ever been treated by a psychiatrist or been in clinical psychiatric care seems surprising in a country with excellent psychiatric facilities. It resonates, however, with studies of suicide in Switzerland more generally, which found that only a minority of completed suicides have ever been in contact with a psychiatric professional (Frei, Bucher, Walter, & Ajdacic-Gross, 2013; Klein, Bischoff, & Schweitzer, 2010). Also, because the perpetrators had some personal and professional standing prior to the incident, it is less surprising that most of them were not suffering from an enduring psychiatric disorder.

The statement of Oliffe et al. (2015), who consider familicide as a male type of suicide, fits the profile. Impending loss of something in which the man is heavily invested—be it employment or spouse—seems a particular stressor for men who identify themselves as providers for their families and experience a considerable identity crisis by potential loss of their social status. Ronningstam, Weinberg, and Maltzberger (2008) had found in another context that seemingly well-functioning, narcissistic individuals who had died by suicide usually would have denied their problems and not sought help.

Finding ways around the refusal or inability of such men to seek professional help in times of crisis could make an important contribution to saving the lives of such men and, in these rare cases, of their families too.

Even though we found the presence of a chronic, major, psychiatric disorder to be a small contributory factor, it should not be disregarded. The close temporal connection we found between the three psychiatric hospitalisations and the familicides seems disturbing but shows how distinct the psychotic crises might have been.

4.1 | Strengths and limitations

In cases where the offender survived, we collected comprehensive information about the personality and psychopathology of the offender and the circumstances of the incident, because there was always a detailed forensic–psychiatric report in the files. In the case of suicide of the perpetrator, the data were not always as detailed as one would hope, such as from a full “psychological autopsy” (Shneidman, 1981). Our study dealt with extremely rare cases of violence (Swanson, 2011)—about 0.009/100,000/annum, extending over 43 years. Nevertheless, it is noteworthy that we found some recurrent themes like the ever-present suicidality or the unremarkable background of the perpetrators, which might be helpful for assessing putative perpetrators in cases of risk assessment or in assessing their legal capacity after their offending.

5 | CONCLUSIONS

Perpetrators of familicide in our national cohort appear to form a distinct group of mass killers, characterised by having a seemingly stable, often high-achieving lifestyle, which they felt so threatened by some professional or relationship crisis that they themselves could no longer go on living but for various reasons—vengeful or altruistic—that they must take the family with them. Sixteen of the complete cohort of 20 cases involved the “classic” constellation of a middle-aged man who murders his family in the context of suicidal ideation or actions. Although gun control may

have some impact on public mass killings, for the familicides, given the variety of lethal means used, control of access to old army weapons would have little impact. A public education programme to encourage men to come forward for help if they feel their treasured lifestyle to be under threat, and for others—professionals and family alike—to recognise the importance of accessing that help would be likely to be much more productive. Recent establishment of regional multidisciplinary “threat management boards” in Switzerland that collect information and coordinate actions (Schweizerische Eidgenossenschaft, 2017) may prove particularly helpful, but their role and impact must be researched even though, given likely numbers affected, this is likely to be a long-term project.

DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no new data were created or analysed in this study.

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REFERENCES

- Belfrage, H., & Rying, M. (2004). Characteristics of spousal homicide perpetrators: A study of all cases of spousal homicide in Sweden 1990–1999. *Criminal Behaviour and Mental Health*, 14(2), 121–133.
- Bruch, H. (1967). Mass-murder: The Wagner case. *American Journal of Psychiatry*, 124(5), 693–698.
- Dietz, P. E. (1986). Mass, serial and sensational homicides. *Bulletin of the New York Academy of Medicine*, 62(5), 477–491.
- Duwe, G. (2017). The patterns and prevalence of mass public shootings in the United States, 1915–2013. In L. C. Wilson (Ed.), *The Wiley Handbook of the Psychology of Mass Shootings* (pp. 20–35). Chichester, West Sussex, England: Wiley Blackwell, Eliason.
- Fox, J. A., & Levin, J. (1998). Multiple homicide: Patterns of serial and mass murder. *Crime and Justice*, 23, 407–455. <https://doi.org/>, <https://doi.org/10.2307/1147545>
- Fox, J. A., & Levin, J. (2014). *Extreme killing: Understanding serial and mass murder* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Frazier, S. H. (1975). Violence and social impact. In J. C. Schooler & C. M. Gaitz (Eds.), *Research and the psychiatric patient*. New York: Brunner & Mazel.
- Frei A., Bucher T., Walter M. & Ajdacic-Gross V. (2013). Suicides in the Canton of Lucerne over 5 years: Subjects with and without psychiatric history and diagnosis *Swiss Med Wkly*. 143:w13779. <http://dx.doi.org/10.4414/smw.2013.13779>
- Fridel E. E. (2017). A multivariate comparison of family, felony, and public mass murders in the United States. *Journal of Interpersonal Violence*. 1–27 <http://dx.doi.org/10.1177/0886260517739286>.
- Friedman, S. H., Hrouda, D. R., Holden, C. E., Noffsinger, S. G., & Resnick, P. J. (2005). Filicide-suicide: Common factors in parents who kill their children and themselves. *The Journal of the American Academy of Psychiatry and the Law*, 33, 496–504.
- Hamilton, L. H. A., Jaffe, P. G., & Campbell, M. (2013). Assessing children's risk for homicide in the context of domestic violence. *Journal of Family Violence*, 28(2), 179–189. <https://doi.org/10.1007/s10896-012-9473-x>
- Ilic, A., & Frei, A. (2019). Mass murder and consecutive suicide in Switzerland: A comparative analysis. *Journal of Threat Assessment and Management*, 6(1), 23–37. <https://doi.org/10.1037/tam0000121>
- Karlsson, L.C., Antfolk, J., Putkonen H., Amon S., da Silva Guerreiro J., de Vogel, V., Flynn S. & Weizmann-Henelius G. (2019) Familicide: A systematic literature review. <https://doi.org/10.1177/1524838018821955>
- Klein SD, Bischoff Ch. & Schweitzer W. (2010) Suicides in the Canton of Zurich (Switzerland). *Swiss Med Wkly*. 140:w13102 h. doi:<https://doi.org/10.4414/smw.2010.13102>
- Liem, M., & Koenraadt, F. (2008). Familicide: A comparison with spousal and child homicide by mentally disordered perpetrators. *Criminal Behaviour and Mental Health*, 18(5), 306–318. <https://doi.org/>, <https://doi.org/10.1002/cbm.710>
- Liem, M., Levin, J., Holland, C., & Fox, J. A. (2013). The nature and prevalence of familicide in the United States, 2000–2009. *Journal of Family Violence*, 28(4), 351–358. <https://doi.org/10.1007/s10896-013-9504-2>
- Liem, M., & Reichelmann, A. (2014). Patterns of multiple family homicide. *Studies*, 18(1), 44–58. <https://doi.org/10.1177/1088767913511460>
- Logan, J. E., Walsh, S., Patel, N., & Hall, J. E. (2013). Homicide-followed-by-suicide incidents involving child victims. *American Journal of Health Behavior*, 37(4), 531–542. <https://doi.org/10.5993/AJHB.37.4.11>
- Markwalder, N., & Killias, M. (2012). Homicide in Switzerland. In M. Liem & W. A. Pridemore (Eds.), *Handbook of European homicide research: Patterns, explanations, and country studies* (pp. 343–354). New York, NY: Springer. https://doi.org/10.1007/978-1-4614-0466-8_22
- Marzuk, P., Tardiff, K., & Hirsch, C. S. (1992). The epidemiology of murder-suicide. *JAMA*, 267(23), 3179–3183.

- Meloy, J. R., Hempel, A. G., Gray, B. T., Mohandie, K., Shiva, A., & Richards, T. C. (2004). A comparative analysis of North American adolescent and adult mass murderers. *Behavioral Sciences & the Law*, 22, 291–309. <https://doi.org/10.1002/bsl.586>
- Olliffe, J. L., Han, C. S. E., Drummond, M., Maria, E. S., Bottorff, J. L., & Creighton, G. (2015). Men, masculinities, and murder-suicide. *American Journal of Men's Health*, 9(6), 473–485. <https://doi.org/10.1177/1557988314551359>
- Ronningstam, E., Weinberg, I. & Maltzberger, J. T. (2008) Eleven deaths of Mr. K.: Contributing factors to suicide in narcissistic personalities. *Psychiatry* 71(2),1 69–82. <https://doi.org/10.1521/psyc.2008.71.2.169>.
- Schweizerische Eidgenossenschaft. (2017). Bedrohungsmanagement, insbesondere bei häuslicher Gewalt. Bericht des Bundesrates in Erfüllung des Postulates Feri 13.3441 vom June 13, 2013 vom 11.Oktober 2017 [Threat management, especially in cases of domestic violence. A report of the Federal Council about the fulfilment of the postulate Feri 13.3441 from June 13, 2013 until 11th October 2017]. Bern, Switzerland: Author.
- Shneidman, E. S. (1981). The psychological autopsy. *Suicide & Life-Threatening Behavior*, 11(4), 325–340.
- Swanson, J. W. (2011). Explaining rare acts of violence: The limits of evidence from population research. *Psychiatric Services*, 62, 1369–1371. https://doi.org/10.1176/ps.62.11.pss6211_1369
- Taylor, M. A. (2018). Mass murder precipitants and motivations of perpetrators. *International Journal of Offender Therapy and Comparative Criminology*, 62(2), 427–449. <https://doi.org/10.1177/0306624X16646805>
- Wilson, M., & Daly, M. (1997). Familicide: Uxoricide plus filicide? *Lethal Violence*, 159, 159–169.
- Wilson, M., Daly, M., & Daniele, A. (1995). Familicide: The killing of spouse and children. *Aggressive Behavior*, 21, 275–291.

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