

Explaining, predicting and preventing the murders perpetrated by individuals before committing suicide.

Jean-François Turmel
Institute of Research in Evolutionary Genetic Psychology

Abstract

A theory enabling to explain, predict and prevent the murders perpetrated by individuals before committing suicide is presented. According to the theory, different genotypes found in the reproductive cells of individuals of populations are engendering individuals who are killing other individuals before committing suicide following a birth in different seasonal periods. The theory is supported by the numerous individuals of the population of the province of Québec who have killed before committing suicide born in early spring presented. According to the theory, individuals born in the same seasonal period as relatives who have killed other individuals before committing suicide having a certain genotype in their genome are likely to display intentions to kill other individuals before committing suicide. It is discussed how the theory should enable to identify males of populations who will display intentions to kill their wives and children before committing suicide and females who will display intentions to kill their children before committing suicide notably and how it could lead to the prevention of murders of females and children.

Introduction

To explain the existence of individuals of populations who are killing other individuals of populations before committing suicide (Daly & Wilson, 1988), it is proposed that genotypes found in reproductive cells of individuals of populations are engendering individuals who are killing other individuals before committing suicide. In a synthetic evolutionary perspective (Darwin, 1859; Mendel, 1866; Mayr, 1970; Hamilton, 1964; Hamilton, 1966; Dawkins, 1976/1989; Wilson, 1975/2000; De Catanzaro, 1980; Turmel, 2006; Turmel, 2007a), it is proposed that individuals of populations who are engendering with genotypes of their reproductive cells descendants who are killing other individuals before committing suicide can leave more descendants in populations in some environments than individuals of populations who are not engendering with genotypes of their reproductive cells descendants who are killing other individuals before committing suicide, descendants of individuals of populations who are killing other individuals before committing suicide, notably mothers killing their children before committing suicide, fathers killing their wives and their children before committing suicide, males and females killing rivals of relatives before committing suicide, can enable other descendants of the individuals of populations, related to the suicidal killers, to have more resources necessary for their survival and reproduction in some environments, other descendants constituted of the same genes as those killing other individuals before committing suicide having in their gametes the genotypes engendering descendants who are killing other individuals before committing suicide with whom they can engender descendants. Considering that the existence of genotypes engendering individuals who are committing suicide following a birth in a seasonal period is suggested by the seasonality of birth of individuals of populations who have committed suicide according to the genotypic theory on completed suicide (Turmel, 2006; Turmel, 2007a), the aim of the study is to examine if genotypes engendering individuals who are killing other individuals before committing suicide following a birth in a seasonal period are found in individuals of populations, which would be suggested by a high or low number of individuals of populations who have killed before committing suicide born in a seasonal period. Also, considering that the existence of genotypes engendering individuals committing suicide during a seasonal period is suggested by the seasonality of suicidal behaviours of individuals of populations who have committed suicide according to the genotypic theory on completed suicide (Turmel, 2006; Turmel, 2007a), the study will also examine if genotypes engendering individuals who are killing other individuals before committing suicide during a seasonal period are found in individuals of populations, which would be suggested by a high or low number

of individuals of populations who have committed suicide during a seasonal period following the murder of other individuals. Synthetic evolutionary interpretations will be given.

Method

The sex, the date of birth, the date of death by suicide following homicide, the age of death by suicide and the municipality of residence of individuals of the province of Québec who have killed other individuals before committing suicide between 1987 and 1999 has been obtained from the file containing the information on individuals of the population of Québec deceased from a trauma of the Bureau du Coroner du Québec as well as, from this file, for these years, the sex, the date of birth, the age at death, the date of death and the municipality of residence of the individuals killed by the individuals who, after their homicide, committed suicide. Chi-Square tests were realized to determine if a high or a low number of these individuals who have killed before committing suicide and who have been killed by individuals who have following their murder committed suicide of the population of Québec were born more or less than expected by chance in a seasonal period and if a high or a low number of these individuals who have killed before committing suicide committed suicide following their homicides more or less than expected by chance during a seasonal period. The expected number of births according to the seasonal periods of the year of the Chi-Square tests was calculated from the number of births according to seasonal periods of the year in the general population of Québec obtained from the Institut de la Statistique du Québec. The expected number of suicides following homicides during seasonal periods of the year of the Chi-square tests was calculated from the total number of suicides following homicides and from the relative number of days of the different months of the year.

Results

A high number of individuals of the population of the province of Québec who have killed other individuals before committing suicide born in early spring ($\chi^2 = 9,58$ $p < 0,01$, see Figure 1) is observed. Also, a high number of individuals of the population of the province of Québec who have killed other individuals before committing suicide have committed suicide following homicides in late summer and early fall ($\chi^2 = 14,47$ $p < 0,001$, see Figure 2). Also, a high number of individuals of the population of the province of Québec born in late winter and early spring who have killed other individuals before committing suicide committed suicide in late summer and early fall ($\chi^2 = 14,14$ $p < 0,001$, see Figure 3) following their murders of other individuals. Also, a high number of males who have killed females, females and children or children before committing suicide born in early spring is observed ($\chi^2 = 9,65$ $p < 0,01$, see Figure 4). Also, a high number of adolescents of the population of the province of Québec who have been killed by adults who have committed suicide following their murder born in late summer and early fall ($\chi^2 = 17,39$ $p < 0,001$, see Figure 5) is observed, while a high number of the adults who have killed these adolescents before committing suicide born in late spring is observed ($\chi^2 = 14,28$ $p < 0,001$). Finally, a high number of young males of the population of Québec who have killed mainly with a firearm other individuals before committing suicide with a firearm born in summer is observed ($\chi^2 = 13,07$ $p < 0,001$, see Figure 6), also observed a high number of females born in summer and early fall killed mainly with a firearm by these young males born mainly in summer who have committed suicide with a firearm following their murder ($\chi^2 = 6,96$ $p < 0,01$, see Figure 7, excluding the 14 females killed with a firearm by a male before the suicide with a firearm of the male on December 6, 1989). Furthermore, considering that individuals of populations can kill other individuals and kill themselves as drivers of a vehicle and in a residence by starting fires, it is also reported that, is observed, of the deceased individuals of the population of Québec between 1987 and 1999, from the trauma file of the Bureau du Coroner du Québec, a high number of males and females deceased driving a car colliding with another car born in winter ($\chi^2 (1) = 14,93$ $p < 0,001$, see Figure 8), a high number of males deceased driving a car colliding with a truck born in summer ($\chi^2 (1) = 18,59$ $p < 0,001$, see Figure 9), a high number of females deceased driving a car colliding with a truck born in spring ($\chi^2 (1) = 8,18$ $p < 0,01$, see Figure 10), a high number of males deceased driving a truck colliding with another truck born in spring ($\chi^2 (1) = 5,15$ $p < 0,05$, see Figure 11), a high number of females deceased driving a truck colliding with another truck born in late

winter and early spring ($\chi^2(1) = 16,54$ $p < 0,001$, see Figure 12), a high number of males deceased riding a motorbike colliding with a car born in late fall and early winter ($\chi^2(1) = 7,70$ $p < 0,01$, see Figure 13), a high number of males deceased riding a motorbike colliding with a truck born in fall ($\chi^2(1) = 17,09$ $p < 0,001$, see Figure 14), a high number of males deceased driving a car colliding with a solid fixed structure born in spring ($\chi^2(1) = 6,54$ $p < 0,05$, see Figure 15), a high number of females deceased driving a car colliding with a solid fixed structure born in late winter and early spring ($\chi^2(1) = 6,85$ $p < 0,01$, see Figure 16), a high number of young females deceased driving a car colliding with a solid fixed structure born in fall ($\chi^2(1) = 8,94$ $p < 0,01$, see Figure 17), a high number of males deceased driving a truck colliding with a solid fixed structure born in late summer and early fall ($\chi^2(1) = 7,84$ $p < 0,01$, see Figure 18), a high number of males deceased riding a motorbike colliding with a solid fixed structure born in late spring and early summer ($\chi^2(1) = 6,77$ $p < 0,01$, see Figure 19), a high number of females deceased driving a car colliding with a train on a railway born in winter ($\chi^2(1) = 10,98$ $p < 0,001$, see Figure 20), a high number of males deceased driving a truck following an overturn born in late fall and early winter ($\chi^2(1) = 11,69$ $p < 0,001$, see Figure 21), a high number of young males deceased driving a truck following an overturn born in spring ($\chi^2(1) = 9,13$ $p < 0,01$, see Figure 22), a high number of females deceased driving a car following an overturn born in late fall and early winter ($\chi^2(1) = 5,52$ $p < 0,05$, see Figure 23), a high number of young males deceased driving a motorbike following an overturn born in late summer and early fall ($\chi^2(1) = 7,92$ $p < 0,01$, see Figure 24), a high number of males deceased of a trauma caused by a fall driving a car born in late winter ($\chi^2(1) = 11,08$ $p < 0,001$, see Figure 25), a high number of females deceased drowned caused by a fall driving a car born in summer ($\chi^2(1) = 13,48$ $p < 0,001$, see Figure 26), a high number of old females deceased passengers of a car colliding with another car born in summer ($\chi^2(1) = 19,75$ $p < 0,001$, see Figure 27), a high number of adolescent females deceased passengers of a car colliding with a truck born in summer ($\chi^2(1) = 11,67$ $p < 0,001$, see Figure 28), a high number of young males deceased passengers of a car colliding with a solid fixed structure born in fall ($\chi^2(1) = 26,77$ $p < 0,001$, see Figure 29), a high number of females deceased passengers of a car after an overturn born in summer ($\chi^2(1) = 13,03$ $p < 0,001$, see Figure 30), a high number of males and females deceased in a shipwreck born in winter ($\chi^2(1) = 8,71$ $p < 0,01$, see Figure 31), a high number of males and females deceased of a trauma caused by a colliding between two boats born in spring ($\chi^2(1) = 5,52$ $p < 0,05$, see Figure 32), a high number of young males deceased drowned from a boat born in summer ($\chi^2(1) = 8,79$ $p < 0,01$, see Figure 33), a high number of males deceased in a snowmobile accident born in late winter and early spring ($\chi^2(1) = 10,52$ $p < 0,01$, see Figure 34), a high number of males deceased driving a snowmobile of drowning or of hypothermia born in spring ($\chi^2(1) = 7,64$ $p < 0,01$, see Figure 35), a high number of males deceased in a four-wheel vehicle accident born in spring ($\chi^2(1) = 10,94$ $p < 0,001$, see Figure 36), a high number of males deceased as a pilot of a plane in the crash of the plane born in late winter and early spring ($\chi^2(1) = 7,03$ $p < 0,01$, see Figure 37), a high number of males deceased as a pilot of a plane in the crash of the plane at the take-off or at the landing of the plane born in late summer and early fall ($\chi^2(1) = 6,07$ $p < 0,05$, see Figure 38), a high number of males and females deceased of asphyxia in the burning of a private house born in late fall and early winter ($\chi^2(1) = 7,23$ $p < 0,01$, see Figure 39), a high number of females deceased of burns in the burning of a private house born in fall ($\chi^2(1) = 5,97$ $p < 0,05$, see Figure 40), a high number of males deceased of asphyxia in the burning of a building born in late summer and early fall ($\chi^2(1) = 4,76$ $p < 0,05$, see Figure 41), a high number of females deceased of asphyxia in the burning of a building born in fall ($\chi^2(1) = 11,93$ $p < 0,001$, see Figure 42) and a high number of males deceased in an explosion caused by a gas born in late spring and early summer ($\chi^2(1) = 13,94$ $p < 0,001$, see Figure 43). Furthermore, regarding the seasonality of birth of individuals of the population of Québec deceased assassinated, not by individuals who have committed suicide following the murder of these individuals, it is reported that, is observed, a high number of male and female infants deceased killed by adults born in winter ($\chi^2(1) = 8,70$ $p < 0,01$, see Figure 44) and born in late summer and early fall ($\chi^2(1) = 7,89$ $p < 0,01$, see Figure 44), a high number of young females deceased assassinated born in late fall and early winter ($\chi^2(1) = 8,15$ $p < 0,01$, see Figure 45), a high number of old males deceased assassinated born in late summer and early fall ($\chi^2(1) = 17,58$ $p < 0,001$, see Figure 46), a high number of males deceased assassinated by a firearm born in winter ($\chi^2(1) = 7,85$ $p < 0,01$, see Figure 47), a high number of females deceased assassinated by a firearm born in fall ($\chi^2(1) = 11,30$ $p < 0,001$, see Figure 48), a high number of males

deceased assassinated by a blade weapon born in late winter and early spring ($\chi^2 (1) = 10,84$ $p < 0,001$, see Figure 49), a high number of females deceased assassinated by strangulation born in fall ($\chi^2 (1) = 13,28$ $p < 0,001$, see Figure 50), a high number of females deceased assassinated by a blunt object born in fall ($\chi^2 (1) = 9,32$ $p < 0,01$, see Figure 51), a high number of females deceased assassinated by the use of fire born in spring ($\chi^2 (1) = 16,85$ $p < 0,001$, see Figure 52), a high number of males deceased assassinated by an explosion born in late fall ($\chi^2 (1) = 14,90$ $p < 0,001$, see Figure 53) and a high number of males deceased assassinated in a fight born in summer ($\chi^2 (1) = 25,56$ $p < 0,01$, see Figure 54). More information on these results, figures showing the seasonality of birth of individuals of the population of Québec deceased from these causes notably, are available in Annex 1 of the report.

Discussion

The observations reported suggest that different genotypes found in the reproductive cells of individuals of populations are engendering individuals who are killing other individuals before committing suicide following a birth in different seasonal periods and that numerous individuals of the population of the province of Québec have in their genome genotypes engendering individuals who are killing other individuals before committing suicide following a birth in early spring, explaining the high number of individuals of the population of Québec who have killed other individuals before committing suicide born in early spring. Also, the observations reported suggest that different genotypes found in the reproductive cells of individuals of populations are engendering individuals who are killing other individuals before committing suicide during different seasonal periods and that numerous individuals of the population of Québec are having in their genome genotypes engendering individuals who are killing other individuals before committing suicide in late summer and early fall, explaining the high number of individuals of the population of Québec who have killed other individuals before committing suicide in late summer and early fall. According to this genotypic theory on homicide before completed suicide, the high number of individuals of the population of Québec born in late winter and early spring who have killed other individuals before committing suicide in late summer and early fall is explained by a high frequency of genotypes engendering individuals who are killing other individuals before committing suicide in late summer and early fall following a birth in late winter and early spring in individuals of the population of Québec.

To explain how such genotypes proposed could have come to be in numerous individuals of the population of Québec, in a synthetic evolutionary perspective, it is proposed that individuals born in spring and summer of the ancestral population of the population of Québec were likely less apt to acquire the resources necessary to survive and to reproduce in their environment (Smits et al., 1999; Lummaa & Tremblay, 2003) because principally likely of individuals born in spring and summer having been affected by infections by pathogens of recurrent summer epidemics during their early development (Turmel, 2007a), pathogens causing diarrhoea notably who could have prevented infants born in spring and summer from assimilating during their early development the nutriments necessary for their important early growth, particularly the male infants born in spring and summer more affected by infections by pathogens (Courville, 1996), and also, possibly, because of individuals born in spring and summer having developed in the uterus of a female during a seasonal period during which the pregnant females could have lacked food (Kuzawa, 2005) following important appropriations of resources of the ancestors of individuals of the population of Québec by authorities (Turmel, 2007a), leading to a possible less favourable early development of these individuals born in spring and summer, quality of the early development of an individual depending on the quality of the food ingested by the mother in which he is developing notably influencing his aptitude to acquire the resources necessary to survive and reproduce later in his environment (Lummaa & Clutton-Brock, 2002), individuals born in spring and summer who could have in these likely circumstances been of a less good physical constitution, having been less healthy and of a smaller size, males and females born in spring and summer who could have also had less than individuals born in other seasonal periods the mental and behavioural aptitudes enabling to acquire the resources of their northern environment (Rushton, 2000) necessary for their survival and reproduction (Hartmann et al., 2006), because of a likely less good brain constitution, of a smaller brain composed of less cortical neurons (Rushton & Ankney, 2007), males and females born in spring and summer

because of their less favourable early development who could have been also less symmetrical (Benderlioglu & Nelson, 2004), smaller males, less symmetrical males, males with lower mental and behavioural aptitudes being less likely to acquire resources in a northern environment with whom to assure their survival and to reproduce (Pawlowski et al., 2000; Rhodes & Simmons, 2007; Rushton, 2000), less likely to acquire resources to couple monogamously to a female displaying an high aptitude to survive and reproduce (Buss, 1989), engender viable children with the female and provide the necessary resources to assure the survival of the progeny engendered to the reproductive age (Trivers, 1972) in their northern environment, behaviours associated with a higher reproductive success for males in a northern environment (Rushton; Turmel, 2007b), smaller females, less symmetrical females, females with lower mental and behavioural aptitudes being less likely to acquire resources with whom to assure their survival and to reproduce in their northern environment (Nettle, 2002; Rhodes & Simmons, 2007; Rushton, 2000), less likely to couple monogamously with a male displaying an high aptitude to survive and reproduce with resources and to engender a viable progeny with the male providing with her the resources necessary for the survival of the progeny engendered to the reproductive age (Trivers, 1972) in their northern environment, behaviours associated with a higher reproductive success for females in such an environment (Rushton, 2000; Turmel, 2007b).

In that synthetic evolutionary perspective, considering that individuals of the ancestral population of the population of Québec born in spring and summer, like mentioned above, were likely less apt to survive and reproduce, it is proposed that individuals of the ancestral population of the population of Québec who have engendered with genotypes of their reproductive cells descendants born in late winter and early spring who have killed other individuals before committing suicide in late summer and early fall left more descendants in the population of Québec than individuals of this ancestral population who have engendered with genotypes of their reproductive cells descendants born in other seasonal periods who have killed other individuals before committing suicide in other seasonal periods, it is proposed that the homicide of individuals perpetrated by descendants of individuals born in late winter and early spring who have following their murder committed suicide, descendants less apt to survive and reproduce in the ancestral environment of Québec, enabled other descendants of the individuals to have more resources necessary for their survival and reproduction in their environment, other descendants born in other seasonal periods more apt to survive and reproduce constituted of the same genes as those of the individuals born in late winter and early spring who have killed other individuals before committing suicide having in their genome and reproductive cells the genotypes engendering descendants born in late winter and early spring who are killing other individuals before committing suicide with whom they have engendered descendants, and that the murder of individuals perpetrated by descendants of individuals born in late winter and early spring who have following their murder committed suicide in late summer and early fall, descendants less apt to survive and reproduce, enabled other descendants of the individuals to have more resources such as food, limited in the environment, during the seasonal period during which more infants were conceived by the individuals of the ancestral population of the population of Québec, in summer and early fall, which could have enabled these other descendants to engender descendants with a higher fitness, having more food notably following the conception of an infant favouring the early development of the infant and affecting positively his early development, which affect positively his fitness, other descendants born in other seasonal periods more apt to survive and reproduce constituted of the same genes as those of the summer and early fall suicidal killers born in late winter and early spring having in their reproductive cells the genotypes engendering the descendants born in late winter and early spring who are killing other individuals before committing suicide in late summer and early fall with whom they have engendered descendants, which could have led to a high frequency of genotypes engendering individuals born in late winter and early spring who are committing suicide in late summer and early fall following the murder of other individuals in individuals of the population of Québec and to the numerous individuals of the population of Québec born in late winter and early spring who have committed suicide in late summer and early fall following the murder of other individuals observed. Supporting the interpretation, numerous of these individuals born in early spring who have killed other individuals before committing suicide were males who have killed females and children before committing suicide and females who have killed children before committing suicide, the death by suicide of these males and females born in early spring less apt to survive and reproduce and the death by

homicide of their likely children perpetrated by them before committing suicide, children also less likely to survive and reproduce because of parents born in early spring less apt to survive and reproduce, could have enabled relatives born in other seasonal periods of the suicidal killer parents more apt to survive and reproduce to have more resources necessary for survival and reproduction in their environment, which could have increased the reproductive success of these relatives constituted of the same genes as those of the parents born in early spring who have killed their children before committing suicide, relatives having in their reproductive cells the genotypes engendering male and female parents killing their children before committing suicide following a birth in early spring with whom they have engendered descendants. According to the theory, it should be possible to predict the murder of children by their parents born in early spring and the suicide of these parents born in early spring following the murder of their children by identifying the individuals of the population who are having in their genome the genotypes engendering parents born in early spring who are killing their children before committing suicide, which are individuals born in early spring related to the parents of the population of Québec born in early spring who have killed their children before committing suicide, if so, the prevention of the murder of children by their parents should be possible by preventing the parents born in early spring identified as having the genotypes proposed in their genome from killing their children before committing suicide.

Coherent with these interpretations, a high number of adolescents born in late summer and early fall killed by adults who have following their murders committed suicide is observed and numerous of these adults who have killed these adolescents born in late summer and early fall before committing suicide were born in late spring. To explain the observations in a synthetic evolutionary perspective, it is proposed that a high frequency of genotypes engendering adults born in late spring who are killing adolescents born in late summer and early fall before committing suicide is found in individuals of the population of Québec. It is proposed that individuals of the ancestral population of the population of Québec who have engendered with genotypes of their reproductive cells adult descendants born in late spring, likely parents, who have killed adolescents born in late summer and early fall, likely their children, before committing suicide, left more descendants in the population of Québec than individuals of this ancestral population who have engendered with genotypes of their reproductive cells adult parent descendants born in other seasonal periods who have killed their children adolescents born in other seasonal periods before committing suicide, the death of adult parent descendants born in late spring and of their children adolescents born in late summer and early fall, adult parent descendants and their children adolescents less apt to survive and reproduce following a birth in late spring and in late summer and early fall because of exposition to pathogens of summer epidemics during early development, children adolescents needing furthermore important amounts of food in puberty for their growth, could have enabled other descendants of the individuals who have engendered them to have more resources necessary for their survival and reproduction in their environment, more food notably, other descendants likely more apt to survive and reproduce because of a birth in other seasonal periods constituted of the same genes as those of the adult parent descendants born in late spring who have killed their children adolescents born in late summer and early fall before committing suicide having in their gametes the genotypes engendering adult parent descendants born in late spring who are killing their children adolescents born in late summer and early fall before committing suicide with whom they have engendered descendants, which led to the high frequency of the genotypes proposed engendering adult parent descendants born in late spring who are killing their children adolescents born in late summer and early fall before committing suicide in individuals of the population of Québec and to the high number of adolescents born in late summer and early fall of the population of Québec killed by adults born in late spring who have committed suicide following their murders observed. According to the theory, it should be possible to predict the murder of adolescents born in late summer and early fall by their adult parents born in late spring and the suicide of the adult parents born in late spring who are killing their children adolescents born in late summer and early fall by identifying the individuals of the population who are having in their genome the genotypes engendering adult parents born in late spring who are killing their children adolescents born in late summer and early fall before committing suicide which are individuals related to the adult parents born in late spring who have killed their children adolescents born in late summer and early fall before committing suicide, if so, the prevention of the murder of adolescents of the population by adults should be possible by preventing the

adults born in late spring identified as having the genotypes proposed in their genome proposed from killing the adolescents before committing suicide.

In that synthetic evolutionary perspective, the high number of young males of the population of Québec born in summer who have killed mainly young females born in summer and early fall mainly with a firearm before committing suicide with a firearm is explained by a high frequency of genotypes engendering young males born in summer who are killing young females born in summer and early fall with a firearm before committing suicide with a firearm in individuals of the population of Québec. It is proposed that the individuals of the ancestral population of Québec who have engendered with genotypes of their reproductive cells young male descendants born in summer who have killed with a firearm young females born in summer and early fall before committing suicide with the firearm left more descendants in the population of Québec than individuals of the ancestral population of Québec who have engendered with genotypes of their reproductive cells male descendants born in other seasonal periods who have killed females born in other seasonal periods before committing suicide, the murder of females born in summer and early fall with a firearm, females less apt to survive and reproduce, by young male descendants born in summer before the suicide of the male descendants with a firearm, young male descendants also less apt to survive and reproduce, could have prevented these young males and females less apt to survive and reproduce from reproducing and using resources doing so, which could have enabled other descendants of the individuals to have more resources necessary for their survival and reproduction, other young descendants likely, more apt to survive and reproduce because of a birth in other seasonal periods, other descendants constituted of the same genes as those of the young male descendants born in summer who have killed young females born in summer and early fall with a firearm before committing suicide with a firearm who were having in their reproductive cells the genotypes engendering young male descendants born in summer who are killing with a firearm young females born in summer and early fall before committing suicide with the firearm with whom they have engendered descendants, which led to a high frequency of genotypes engendering young males born in summer who are killing young females born in summer and early fall with a firearm before committing suicide with a firearm in individuals of the population of Québec and to the numerous young males of the population born in summer who have killed young females born in summer and early fall with a firearm before committing suicide with a firearm observed. If so, the prediction and prevention of murders with a firearm of young females followed by suicides with a firearm of the killer young males is possible by identifying the individuals of the population who are having in their genome the genotypes proposed, notably the young males born in summer carriers of the genotypes related to the young males born in summer who have killed young females with a firearm before committing suicide with a firearm.

In the synthetic evolutionary perspective presented, thinking about the genes in individuals of populations, by engendering individuals born in spring and summer who are less apt to reproduce them who are killing other individuals born in spring and summer, also less apt to reproduce them, before committing suicide, genes can increase their replication by enabling individuals in which they are in copies, relatives of the suicidal killers, more apt to reproduce them because of a birth in other seasonal periods, to have more resources necessary to reproduce and engender copies of them, more food notably.

Also, to explain a high number of individuals of the population of Québec deceased driving a vehicle, deceased in the burning of a residence and deceased in an explosion born in spring and summer, individuals born in spring and summer who could have caused the death of other individuals by causing their death driving a vehicle, causing the burning of a residence and causing an explosion, it is proposed that different genotypes engendering individuals dying driving a vehicle, causing likely their death driving a vehicle, dying in the burning of a residence, causing likely the burning of the residence, and dying in an explosion, causing likely the explosion, following a birth in different seasonal periods are found in individuals of populations and that a high frequency of genotypes engendering individuals born in spring and summer dying driving a vehicle, causing likely their death driving a vehicle, dying in the burning of a residence, causing likely the burning of the residence, and dying in an explosion, causing likely the explosion, is found in individuals of the population of Québec, in a synthetic evolutionary perspective, it is proposed that individuals of the ancestral population of the population of Québec who have engendered with genotypes of their reproductive cells descendants born in spring and summer deceased driving a vehicle, deceased in the burning of a

residence and deceased in an explosion, left more descendants in the population of Québec than individuals of this ancestral population who have engendered with other genotypes of their reproductive cells descendants born in other seasonal periods deceased of these causes because the death from these causes of these descendants born in spring and summer, likely less apt to acquire in their environment the resources necessary to survive and reproduce could have enabled other descendants born in other seasonal periods, likely more apt to acquire in their environment the resources necessary to survive and reproduce to have more resources necessary for their survival and reproduction in their environment, resources such as food limited in their environment, other descendants constituted of the same genes as those constituting the descendants born in spring and summer deceased of these causes who were having in their genome and reproductive cells the genotypes engendering descendants born in spring and summer dying of these causes with whom they have engendered descendants, which could have led to numerous individuals of the population of Québec having in their genome and reproductive cells genotypes engendering individuals dying of these causes following a birth in spring and summer and to the numerous individuals of the population of Québec born in spring and summer deceased driving a vehicle, deceased in the burning of a residence and deceased in an explosion observed. In the synthetic evolutionary perspective presented, it is possible that different genotypes engendering individuals who are causing their death and the death of others driving a vehicle, causing the burning of a residence and causing an explosion following a birth in different seasonal periods are found in different frequencies following micro-evolutions in individuals of populations. To know if so, the seasonality of birth of individuals of populations who have caused their death and who have caused the death of others by driving a vehicle, by starting the fire of a residence and by causing an explosion must be studied. It is possible that these individuals born in spring and summer who are causing their death driving a vehicle, causing the burning of a residence and causing an explosion, could cause the death of other individuals born in spring and summer also less apt to survive and reproduce, which could have enabled other descendants of the individuals who have engendered the individuals born in spring and summer who have caused their death and the death of others born in spring and summer to have more resources necessary for their survival and reproduction in their environment, other descendants more apt to survive and reproduce than those born in spring and summer, other descendants born in other seasonal periods constituted of similar genes as those of the individuals born in spring and summer who have caused their death and the death of other individuals born in spring and summer driving a vehicle, starting the fire of a residence and causing an explosion who could have had in their reproductive cells the genotypes engendering these phenotypes with whom they could have engendered descendants, which could have led to a high frequency of individuals of populations having in their genome and reproductive cells genotypes engendering individuals born in spring and summer who are causing their death and the death of other individuals born in spring and summer driving a vehicle, starting the fire of a residence and causing an explosion and to numerous individuals of populations born in spring and summer who are causing their death and the death of other individuals born in spring and summer driving a vehicle, starting a fire of a residence and causing an explosion, notably to a high frequency of proposed genotypes in individuals of populations in the conditions described engendering fathers and mothers born in spring and summer who are causing their death and the death of their children born in spring and summer driving a vehicle, starting the fire of a residence and causing an explosion and to a high frequency of proposed genotypes in individuals of populations in the conditions described engendering young males born in spring and summer who are causing their death and the death of young females born in spring in summer driving a vehicle. The high numbers of individuals of the population of Québec deceased passengers of a vehicle born in spring and summer observed as well as the high numbers of individuals of this population deceased driving a vehicle born in spring and summer appears to support this possibility. To know if so, the seasonality of birth of the individuals of populations killed by those who have caused their death by driving a vehicle, by starting the fire of a residence and by causing an explosion and the seasonality of birth of individuals of populations who have killed other individuals by causing their death by these means must be studied in more details.

Also, to explain a high number of individuals of the population of Québec deceased driving a vehicle born in fall and winter and deceased in the burning of a residence born in fall and winter, individuals born in fall and winter who could have caused the death of other individuals by causing their death driving a vehicle and

causing the burning of a residence, it is proposed that there is a high frequency of genotypes engendering individuals born in fall and winter who are causing their death driving a vehicle and starting the fire of a residence in the individuals of the population of Québec following micro-evolutions. Considering that individuals of the ancestral population of the population of Québec born in fall and winter were likely more apt to acquire the resources necessary to survive and reproduce in their environment (Smits et al., 1999; Lummaa & Tremblay, 2003) because of a possible more favourable early development affected less negatively by food shortages, having developed in the uterus of a better fed female (Kuzawa, 2005) during a seasonal period during which pregnant females were having more food in their environment, in fall and winter, following the annual summer and fall agrarian harvests of nutriment, male descendants born in fall and winter having possibly been of a better physical constitution, more healthy, of a larger size (Kościński et al., 2004), consuming likely more food, having been possibly more symmetrical (Benderlioglu & Simmons, 2004), males born in fall and winter who could have also had more than individuals born in other seasonal periods the mental and behavioural aptitudes enabling to acquire the resources of their northern environment (Rushton, 2000) necessary for their survival and reproduction (Hartmann et al., 2006), because of a likely better brain constitution, of a likely bigger brain composed of more cortical neurons (Rushton & Ankney, 2007), taller males, more symmetrical males, males displaying higher mental and behavioural aptitudes having been possibly more likely to acquire resources with whom to assure their survival and to reproduce in their northern environment (Pawlowski et al., 2000; Rhodes & Simmons, 2007; Rushton, 2000), notably to acquire resources with whom to couple monogamously with a female displaying an high aptitude to survive and reproduce (Buss, 1989), engender a viable progeny with the female and to provide the necessary resources to sustain the survival of the progeny engendered (Trivers, 1972) to the reproductive age, behaviours associated with an higher reproductive success for males in a northern environment (Rushton, 2000; Turmel, 2007b), female descendants born in fall and winter having been also likely of a better physical constitution, more healthy, of a size enabling them to engender numerous descendants, not of a smaller size (Nettle, 2002), and having been likely to engender sons of a larger size consuming more food and numerous daughters of a size enabling them to engender numerous descendants, not of a smaller size (Nettle, 2002), females born in fall and winter who could have also had more than individuals born in other seasonal periods the mental and behavioural aptitudes enabling to acquire the resources of their northern environment (Rushton, 2000) necessary for their survival and reproduction (Hartmann et al., 2006), because of a likely better brain constitution, because of a likely bigger brain composed of more cortical neurons (Rushton & Ankney, 2007), females born in fall and winter who could also have been more symmetrical (Benderlioglu & Simmons, 2004), more symmetrical females being possibly more likely to establish a monogamous relationship with a male displaying an high aptitude to survive and reproduce with resources to engender children and assure the subsistence of the children with the male (Rhodes & Simmons, 2007), desired monogamous mating to a loving male with resources displaying paternal investment (Trivers, 1972; Buss, 1989) toward the children engendered with her associated to an higher reproductive success for the females of the ancestral population of the population of Québec in their northern climate (Smits et al., 1999; Lummaa & Tremblay, 2003; Rushton, 2000; Turmel, 2007b), individuals born in fall and winter who could have also been less affected by infections by pathogens of seasonal epidemics during their early growth that was affecting the infants more commonly during the recurrent epidemics of hot summers, male infants particularly (Courville, 1996), which could have contributed to render them more apt to acquire the resources necessary to survive and reproduce in their environment (Lummaa & Clutton-Brock, 2002), in these conditions, it is proposed that individuals of the ancestral population of the population of Québec who have engendered with genotypes of their reproductive cells descendants born in fall and winter deceased driving a vehicle and deceased in the burning of a residence left more descendants in the population of Québec than individuals of this ancestral population who have engendered with other genotypes of their reproductive cells descendants born in other seasonal periods deceased of these causes because the death of these descendants born in fall and winter, likely more apt to acquire resources necessary to survive and reproduce in their environment, of a possible larger size consuming likely more food, who could have engendered numerous descendants consuming more food, have likely reduced the number of descendants that individuals of the ancestral population of the population of Québec have engendered and likely reduced the size of the

descendants that they have engendered in conditions in which the number of descendants that they could have engendered was limited by the lack of resources necessary for survival and reproduction of individuals such as food, because notably of the important appropriations of resources of the individuals of the population by authorities (Turmel, 2007a), which enabled the less numerous descendants engendered to have more of the limited resources such as food needed for their survival and reproduction in their environment, among these less numerous descendants, some born in other seasonal periods than some fall and winter periods not dying of these causes of a possible smaller size consuming less food apt to engender less descendants and descendants of a smaller size consuming less food, less numerous descendants constituted of similar genes as those of the descendants born in fall and winter deceased of these causes in reproductive cells of which were the genotypes engendering descendants born in fall and winter dying driving a vehicle and dying in the burning of a residence with whom they have engendered descendants, which could have led to numerous individuals of the population of Québec having in their genome and reproductive cells genotypes engendering individuals dying driving a vehicle and dying in the burning of a residence following a birth in fall and winter and to the numerous individuals of the population of Québec born in fall and winter deceased of these causes, notably, following a birth in fall and winter, to numerous young females born in fall and winter more apt to survive and reproduce deceased driving a vehicle and deceased in the burning of a residence could have reduced the number of descendants that individuals who have engendered them engendered, young females engendering the children in a large proportion. Considering that individuals who are causing their death driving a vehicle and causing the burning of a residence can also cause the death of other individuals doing so, it is proposed that genotypes engendering individuals who are causing their death driving a vehicle and causing the burning of a residence and who are causing the death of other individuals doing so following a birth in fall and winter can be in individuals of populations. To verify it, the seasonality of birth of individuals who have caused their death driving a vehicle and by causing the burning of a residence and who have caused the death of other individuals doing so should be studied as well as the seasonality of birth of individuals deceased killed by individuals who have caused their death driving a vehicle and by causing the burning of a residence, individuals born in fall and winter more apt to survive and reproduce in their environment being likely to cause the death of other individuals born in fall and winter, also more apt to survive and reproduce doing so, the death of all these individuals, if born in fall and winter, likely more apt to survive and reproduce in their environment can enable to reduce the number of descendants that individuals who are engendering them are engendering, which can enable the less numerous descendants engendered to have more limited resources necessary for survival and reproduction in their environment in which resources are more limited, less numerous descendants born in other seasonal periods than fall and winter periods apt to engender less descendants who can have in their reproductive cells genotypes engendering individuals born in fall and winter causing their death and the death of others born in fall and winter driving a vehicle and by causing the burning of a residence, which can lead to numerous of these genotypes in individuals of populations when resources necessary for survival and reproduction of individuals are limited in an environment and when the number of descendants that individuals can engender in the environment is limited because of it and to numerous individuals of populations born in fall and winter causing their death and the death of other individuals born in fall and winter driving a vehicle and by causing the burning of a residence, possibly to numerous fathers and mothers of populations born in fall and winter causing their death and causing the death of their children born in fall and winter driving a vehicle and causing the burning of a residence in such circumstances.

In the synthetic evolutionary perspective presented, by engendering individuals more apt to reproduce them following a birth in fall and winter in their environment who are killing other individuals likely more apt to reproduce them before committing suicide, genes in individuals of populations engendering these phenotypes can be in less individuals, in environments in which individuals are lacking the resources necessary to reproduce them by engendering new individuals in which they are in copies, being in less individuals can lead them to be in more individuals apt to reproduce them by having the limited necessary resources to reproduce them, being in too much individuals in environments in which the individuals in which they are in copies are lacking the resources necessary such as food to reproduce them can lead them to be in numerous

individuals who are lacking the resources necessary such as food to reproduce them, which can lead them to be in less individuals apt to reproduce them by engendering new individuals in which they are in copies.

In summary, it is proposed that different genotypes engendering individuals who are causing their death and who are causing the death of other individuals following a birth in different seasonal periods found in different frequencies in individuals of populations following micro-evolutions explain the observations reported. According to this genotypic theory on mortality (Turmel, 2007c), an individual of a population born in a certain seasonal period who have caused his death and who have caused the death of another individual or of other individuals is explained by the existence in his genome of a genotype engendering an individual born in the certain seasonal period who is causing his death and who is causing the death of another individual or of other individuals. According to the theory, an individual born in a certain seasonal period having a certain genotype in his genome related to an individual born in the seasonal period who have caused his death and who have caused the death of another individual or of other individuals is likely to cause his death and the death of another individual or of other individuals, like the relative. According to the theory, an individual related to an individual who have caused his death and who have caused the death of another individual or of other individuals following a birth in a certain seasonal period is likely to have in his reproductive cells a genotype with whom he can engender a descendant who will cause his death and who will cause the death of another individual or of other individuals like the relative following a birth in the seasonal period, the individual can avoid to conceive a descendant who will cause his death and who will cause the death of another individual or of other individuals by avoiding to conceive with his reproductive cells containing the proposed genotype descendants nine months before the seasonal period to avoid the birth of his descendants during the seasonal period. Also, in order to prevent the death of individuals killed by individuals having a certain genotype in their genome who are killing their selves and other individuals doing so following a birth in a certain seasonal period, it must be considered to prevent like it is possible these individuals identified as being likely to kill their selves and other individuals, individuals born in certain seasonal periods having certain genotypes in their genome, from killing other individuals causing their death. It is likely, according to the genotypic theory on mortality (Turmel, 2007c), that the age at which an individual born in a certain seasonal period having a certain genotype in his genome will cause his death and cause the death of another individual or of other individuals will be predicted assuming a genotype engendering this phenotype in an individual at a certain age following a birth in a certain seasonal period.

Concerning the high numbers of individuals of the population of the province of Québec deceased assassinated born in fall and winter, it is proposed that genotypes engendering individuals who are getting in relationships with individuals who will kill them following a birth in fall and winter and/or genotypes engendering individuals who will kill individuals born in fall and winter found in numerous individuals of the population of Québec explain these observations. In a synthetic evolutionary perspective, like mentioned previously, considering that individuals of the ancestral population of the population of Québec born in fall and winter were likely more apt to acquire the resources necessary for their survival and reproduction in their environment (Smits et al., 1999; Lummaa & Tremblay, 2003), it is possible that individuals of the ancestral population of Québec who have engendered with genotypes of their reproductive cells descendants who have gotten in relationships with individuals who have killed them following a birth in fall and winter left more descendants in the population of Québec than individuals of this ancestral population who have engendered with other genotypes of their reproductive cells descendants who have gotten in relationships with individuals who have killed them following a birth in other seasonal periods, the murder of descendants born in fall and winter more apt to survive and reproduce who could have engendered numerous descendants could have reduced the number of descendants of the individuals who have engendered them in a context in which the number of descendants that individuals could have engendered was limited by lack of necessary resources such as food for their survival and reproduction, enabling the less numerous descendants engendered to have more of the limited resources necessary for their survival and reproduction, among the less numerous descendants, descendants born in other seasonal periods than fall and winter periods apt to engender less numerous descendants constituted of similar genes as those of the descendants born in fall and winter deceased assassinated after having been in relationships with individuals who have killed them having in their genome and reproductive cells the genotypes engendering the descendants born in fall and winter

who are getting in relationships with individuals who are killing them with whom they have engendered descendants, which could have led to the numerous individuals of the population of Québec having in their genome and reproductive cells genotypes engendering descendants entering in relationships with individuals who are killing them following a birth in fall and winter, and to the numerous individuals of the population of Québec deceased assassinated born in fall and winter, notably to the numerous young females of the population of Québec born in late fall and early winter deceased assassinated and to the numerous young males of the population of Québec born in winter deceased assassinated with a firearm observed. If so, the individuals of the population of Québec deceased assassinated born in fall and winter are relatives and it should be predicted that individuals born in fall and winter related to the individuals born in fall and winter deceased assassinated having a certain genotype in their genome could enter in relationships with individuals who will kill them, the prevention of the murder of such individuals could be possible by preventing these individuals from entering in relationships with individuals who could kill them. Also, in a synthetic evolutionary perspective, it is also possible that individuals of the ancestral population of Québec who have engendered with genotypes of their reproductive cells descendants who have killed individuals born in fall and winter left more descendants in the population of Québec than individuals of this ancestral population who have engendered with other genotypes of their reproductive cells descendants who have killed individuals born in other seasonal periods, the murder of individuals born in fall and winter more apt to acquire in their environment the resources necessary for survival and reproduction could have enabled the killers to have more of the resources necessary for their survival and reproduction in their environment, resources that they would not have had if they had not killed the individuals born in fall and winter, resources that could have had the individuals born in fall and winter, which could have enabled the killers to engender more descendants, descendants in which can be the genotypes engendering the individuals who are killing individuals born in fall and winter, which could have led to numerous individuals of the population of Québec having in their genome and reproductive cells the genotypes engendering individuals who are killing individuals born in fall and winter and to the numerous individuals of the population of Québec born in fall and winter deceased assassinated, in that perspective, the murder of young females born in late fall and early winter more apt to acquire in their environment the resources necessary for their survival and reproduction who could have engendered numerous descendants by using important amounts of resources that they might have had such as food could have enabled the killers to have more resources for their survival and reproduction, more food notably, and the murder with a firearm of young males born in winter more apt to acquire the resources necessary for their survival and reproduction in their environment possibly of a better physical constitution and of a greater size, being more likely to couple with females to reproduce and engender numerous descendants could have enabled the killers, in a large proportion other males likely, young males being killed in a large proportion by young males (Daly & Wilson, 1988), to have more resources like females with whom to reproduce or resources with whom they could have coupled with females to reproduce, killers likely less apt to acquire the resources necessary to survive and reproduce in their environment born in other seasonal periods than fall and winter periods, periods of birth of the killed more apt to acquire the resources. If so, the individuals who have killed the individuals of the population of Québec born in fall and winter are relatives and it should be possible to predict that these individuals and individuals related to these individuals who have killed individuals born in fall and winter having a certain genotype in their genome will likely kill individuals born in fall and winter, if so, the prevention of the murder of individuals born in fall and winter could be possible by preventing such individuals having a certain genotype in their genome from killing individuals born in fall and winter.

In the same synthetic evolutionary perspective, the high number of individuals of the population of the province of Québec deceased assassinated born in spring and summer can be explained by a high frequency, in individuals of the population of Québec, of genotypes engendering individuals born in spring and summer who are getting in relationships with individuals who are killing them and/or genotypes engendering individuals who are killing individuals born in spring and summer. Like mentioned previously, considering that individuals of the ancestral population of the population of Québec born in spring and summer were likely less apt to acquire the resources necessary for their survival and reproduction in their environment (Smits et al., 1999; Lummaa & Tremblay, 2003), it is possible that the individuals of the ancestral population

of Québec who have engendered with genotypes of their reproductive cells descendants born in spring and summer who have gotten in relationships with individuals who have killed them left more descendants in the population of Québec than individuals of this ancestral population who have engendered with other genotypes of their reproductive cells descendants born in other seasonal periods who have gotten in relationships with individuals who have killed them, the murder of these descendants born in spring and summer less apt to survive and reproduce could have enabled other descendants of the individuals born in other seasonal periods more apt to survive and reproduce to have more resources needed for their survival and reproduction in their environment, resources such as food that lacked to individuals of the ancestral population of the population of Québec, other descendants constituted of the same genes as those constituting the descendants born in spring and summer deceased assassinated who were having in their reproductive cells the genotypes engendering descendants born in spring and summer dying getting in relationships with individuals who are killing them with whom they have engendered descendants, which could have led to numerous individuals of the population of Québec having in their genome and reproductive cells genotypes engendering descendants born in spring and summer who are dying by getting in relationships with individuals who are killing them and to the numerous males individuals of the population of Québec born in spring and summer deceased assassinated. If so, the numerous individuals of the population of Québec born in spring and summer deceased assassinated are relatives and it can be predicted that individuals born in spring and summer having a certain genotype in their genome related to the numerous individuals born in spring and summer deceased assassinated will likely die assassinated by getting in relationships with individuals who will kill them. If so, the murder of these individuals born in spring and summer having a certain genotype in their genome can be prevented by preventing them from getting in relationships with individuals who would kill them. It is also possible that the individuals of the ancestral population of the population of Québec who have engendered with genotypes of their reproductive cells descendants who have killed individuals born in spring and summer left more descendants in the population of Québec than individuals of this ancestral population who have engendered with genotypes of their reproductive cells descendants who have killed individuals born in other seasonal periods, the individuals born in spring and summer having been possibly less apt to acquire the resources necessary to sustain their survival and reproduction and having been likely to depend on others for the possession of such resources, the murder of these individuals born in spring and summer less apt to survive and reproduce could have enabled the killers to have more resources that they would not have had if they had not killed individuals born in spring and summer, which could have enabled the killers of individuals born in spring and summer to engender more descendants in such conditions of individuals born in spring and summer less apt to survive and reproduce assassinated, more descendants in which were the genotypes engendering the individuals who are killing the individuals born in spring and summer, which could have led to numerous individuals of the population of Québec having in their genome and reproductive cells genotypes engendering descendants who are killing individuals born in spring and summer and to the numerous individuals of the population of Québec born in spring and summer deceased assassinated. If so, individuals who have killed the numerous individuals of the population of Québec born in spring and summer are relatives and it can be predicted that these individuals and relatives of these individuals having a certain genotype in their genome are likely to kill individuals born in spring and summer. If so, the murders of individuals born in spring and summer is possible by preventing the individuals who are having in their genome genotypes leading them to kill individuals born in spring and summer from killing these individuals born in spring and summer. In that perspective, the murder of old males of the population of the province of Québec born in late summer and early fall, old males born in late summer and early fall who could have been less apt to survive and reproduce in their environment and who could have depended on others to have the resources necessary for their survival and reproduction (Kaplan et al., 2000) could have enabled relatives of these males to have more resources necessary to survive and reproduce, relatives in which were the genotypes engendering old males born in late summer and early fall who are getting in relationships with individuals who are killing them, and could also have enabled the killers to have more resources needed for their survival and reproduction, limited resources, which could have enabled the killers to engender more descendants, more descendants in which were the genotypes engendering the individuals who are killing old males born in late summer and early fall, leading to an high

frequency of genotypes engendering old males born in late summer and early fall dying assassinated in individuals of the population of Québec and to the numerous old males of the population of Québec born in late summer and early fall deceased assassinated.

Concerning the high number of infants of the population of the province of Québec deceased assassinated, mainly by parents, born in winter and born in late summer and early fall, it is proposed that different genotypes found in the reproductive cells of individuals of populations are engendering parents who are killing infants born in different seasonal periods and that an high frequency of genotypes engendering parents who are killing infants born in winter and born in late summer and early fall in individuals of the population of Québec explain the observation. In a synthetic evolutionary perspective (Trivers, 1972; Trivers, 1974; Daly & Wilson, 1988; Turmel, 2007c), it is proposed that individuals of the ancestral population of the population of Québec who have engendered with genotypes of their reproductive cells parent descendants who have killed their infants born in winter and born in late summer and early fall left more descendants in the population of Québec than individuals of this ancestral population who have engendered with other genotypes of their reproductive cells parent descendants who have killed their infants born in other seasonal periods, the aptitude to survive and later reproduce of infants born in winter of the ancestral population of the population of Québec having been likely higher than the one of infants born in other seasonal periods, these infants born in winter having been less affected by food shortage and by pathogens of summer epidemics during their early development, infants born in winter having been likely heavier and having been likely to consume more food for their growth, and having been likely to later at an age of reproducing engender numerous descendants consuming important amounts of food, it is proposed that the murder of these infants born in winter could have enabled their parents to engender less descendants and to have descendants consuming less food in a context in which the resources necessary for survival and reproduction of individuals of the ancestral population of Québec such as food lacked, which enabled other children of the parents who have killed these infants born in winter to have more resources necessary for their survival and reproduction such as food, other descendants born in other seasonal periods apt to engender less descendants in a context in which the number of descendants that individuals were able to engender was limited, other descendants of a smaller size, consuming less food, constituted of similar genes as those of the parents who are killing infants born in winter who have carried in their genome and reproductive cells the genotypes engendering parents killing infants born in winter with whom they have engendered descendants, which led to numerous individuals of the population of Québec having in their genome and reproductive cells genotypes engendering parents killing infants born in winter, to the numerous parents of the population of Québec who have killed infants born in winter and to the numerous infants of the population of Québec born in winter deceased assassinated, among them numerous male infants, of a larger size, also the aptitude to survive and later reproduce of infants born in late summer and early fall of the ancestral population of the population of Québec having been likely lower than the one of infants born in other seasonal periods, these infants born in late summer and early fall having been more affected by pathogens of summer epidemics during their early development, it is proposed that the murder of these infants born in late summer and early fall could have enabled other children of the parents who have killed these infants born in late summer and early fall to have more resources necessary for their survival and reproduction in a context in which the resources necessary for survival and reproduction such as food lacked to individuals of the ancestral population of the population of Québec, other children born in other seasonal periods more apt to survive and reproduce because of an early development less affected by pathogens of summer epidemics, constituted of similar genes as those of the parents who are killing infants born in late summer and early fall who have carried in their reproductive cells the genotypes engendering parents killing infants born in late summer and early fall with whom they have engendered descendants, which led to numerous individuals of the population of Québec having in their genome and reproductive cells genotypes engendering parents killing infants born in late summer and early fall, to the numerous parents of the population of Québec who have killed infants born in late summer and early fall and to the numerous infants of the population of Québec born in late summer and early fall deceased assassinated. Concerning the prevention of the murders of infants by parents principally, according to the genotypic theory on infanticide presented, it can be predicted that parents of infants born in a certain seasonal period having a certain genotype in their genome related to the parents who

have killed infants born in the particular seasonal period could kill their infants born in the particular seasonal period. The prevention of the murders of infants born in a certain seasonal period by parents having a certain genotype in their genome could be possible by removing the infants born in the particular seasonal period from the environment of the parents having a certain genotype in their genome leading them to kill infants born in the particular seasonal period.

The seasonality of birth of individuals of populations who have killed before committing suicide, the seasonality of birth of individuals of populations who have caused their death and who could have caused the death of other individuals driving a vehicle, causing the burning of a residence and causing their death by causing an explosion and the seasonality of birth of individuals deceased assassinated presented suggest, according to the genotypic theory on mortality (Turmel, 2007c), the existence of different genotypes engendering individuals who are killing other individuals by different means following a birth in different seasonal periods in different frequencies following micro-evolutions in individuals of populations, the seasonality of birth of individuals of populations who have killed other individuals, without necessarily causing their death doing so, should be studied, numerous or few individuals of populations who have caused the death of other individuals born in some seasonal periods would reveal the existence of such genotypes in high or low frequencies in individuals of populations following micro-evolutions, which would enable to predict and prevent the murders of these individuals of populations having particular genotypes in their genome born in some seasonal periods, this should be done considering the familial and genetic relationships between individuals of populations affecting the display of murderous behaviours of individuals of populations toward other individuals of populations (Turmel, 2007d).

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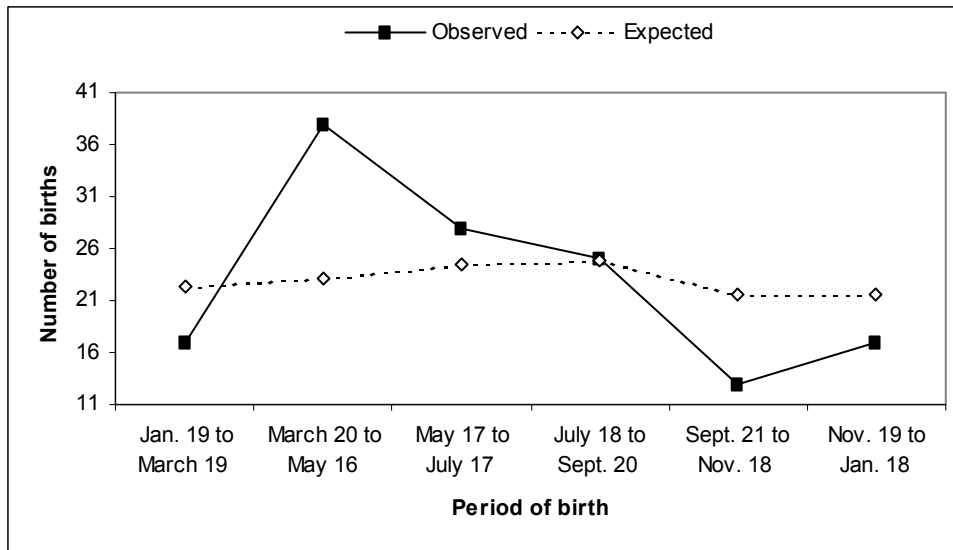
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Annex 1

Homicide Suicide

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering males and females who are dying committing suicide following their murder of other individuals following a birth in different seasonal periods and the numerous males and females of the population of the province of Québec deceased after having committed suicide following their murder of other individuals born in early spring (between March 20 and May 16, $\chi^2(1) = 9,58 p < 0,01$) presented on Figure 1 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering males and females dying committing suicide after their murder of other individuals following a birth in early spring. According to the theory, it can be predicted that males and females born in early spring related to the numerous males and females born in early spring deceased after having committed suicide following their murder of other individuals having in their genome such a genotype will likely die committing suicide following their murder of other individuals. According to the theory, it is possible to prevent the murders perpetrated by these males and females born in early spring before committing suicide having in their genome a proposed genotype by doing the possible to prevent them from killing other individuals such as mates and children before committing suicide. Also, according to the theory, individuals related to these numerous males and females born in early spring deceased after having committed suicide following their murder of other individuals can have in their reproductive cells the genotypes engendering male and females descendants born in early spring dying committing suicide following their murder of other individuals and can avoid to conceive sons and daughters who will die from this cause and kill other individuals before dying of this cause by avoiding to conceive with their reproductive cells containing the proposed genotypes sons and daughters in early summer (between late June and mid-August) to avoid the birth of their sons and daughters in early spring (between late March and mid-May).

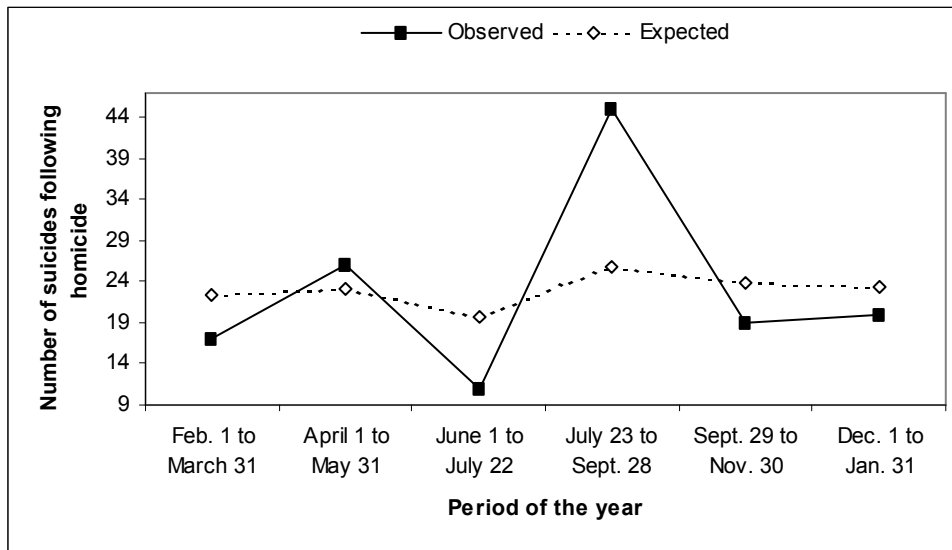
Figure 1. Observed and Expected number of births according to seasonal periods of the year of males and females of the population of the province of Québec deceased having committed suicide aged between 23 and 68 years old after having killed other individuals between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Homicide Suicide

According to a genotypic theory postulating the existence of different genotypes engendering individuals displaying different phenotypes in different seasonal periods found in different frequencies in individuals of populations, different genotypes in individuals of populations found in different frequencies are engendering males and females who are dying committing suicide following their murder of other individuals in different seasonal periods and the numerous males and females of the population of the province of Québec deceased after having committed suicide following their murder of other individuals in late summer and early fall (between July 23 and September 28, $\chi^2(1) = 14,47$ $p < 0,001$) presented on Figure 2 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering males and females dying committing suicide after their murder of other individuals in late summer and early fall. According to the theory, it can be predicted that males and females born in a certain seasonal period having a certain genotype in their genome related to the numerous males and females deceased after having committed suicide following their murder of other individuals in late summer and early fall will likely die committing suicide following their murder of other individuals in late summer and early fall. According to the theory, it is possible to prevent the murders perpetrated in late summer and early fall by these males and females born in a certain seasonal period having a certain genotype in their genome before committing suicide by doing the possible to prevent them from killing other individuals such as mates and children before committing suicide in late summer and early fall. Also, according to the theory, individuals related to these numerous males and females deceased after having committed suicide following their murder of other individuals in late summer and early fall can have in their reproductive cells the genotypes engendering male and females descendants born in a certain seasonal period dying committing suicide following their murder of other individuals in late summer and early fall and can avoid to conceive sons and daughters who will die from this cause and kill other individuals before dying of this cause in late summer and early fall by avoiding to conceive with their reproductive cells containing the proposed genotypes sons and daughters nine months before the seasonal period of birth of relatives who have killed other individuals before committing suicide in late summer and early fall to avoid the birth of their sons and daughters during the seasonal period of birth.

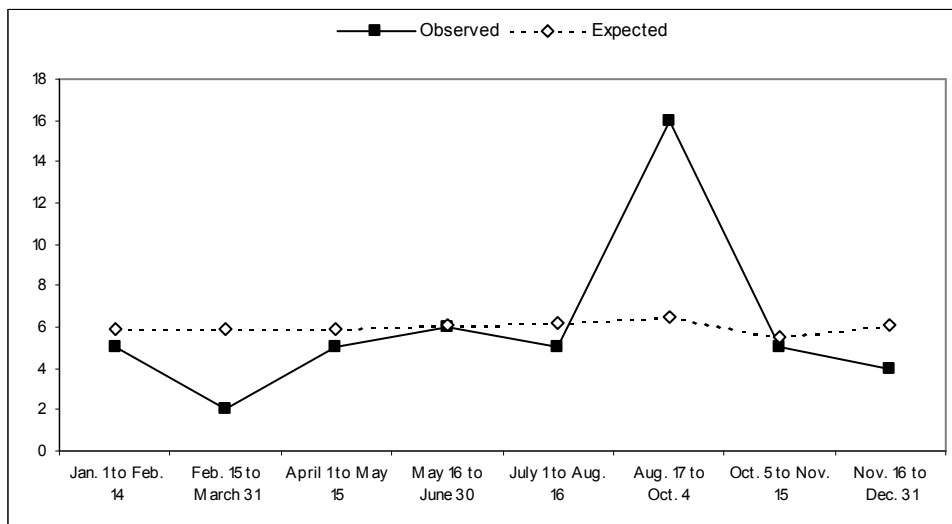
Figure 2. Observed and Expected number of suicides following homicides according to seasonal periods of the year of males and females of the population of the province of Québec deceased having committed suicide aged between 23 and 68 years old after having killed other individuals between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Homicide Suicide

According to a genotypic theory postulating the existence of different genotypes engendering individuals displaying different phenotypes in different seasonal periods following a birth in different seasonal periods found in different frequencies in individuals of populations, different genotypes in individuals of populations found in different frequencies are engendering males and females who are dying committing suicide following their murder of other individuals in different seasonal periods following a birth in different seasonal periods and the numerous males and females of the population of the province of Québec born in late winter and early spring deceased after having committed suicide following their murder of other individuals in late summer and early fall (between August 17 and October 4, $\chi^2(1) = 14,14$ $p < 0,001$) presented on Figure 3 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering males and females born in late winter and early spring dying committing suicide after their murder of other individuals in late summer and early fall. According to the theory, it can be predicted that males and females born in early spring having a certain genotype in their genome related to the numerous males and females born in early spring deceased after having committed suicide following their murder of other individuals in late summer and early fall will likely die committing suicide following their murder of other individuals in late summer and early fall. According to the theory, it is possible to prevent the murders perpetrated in late summer and early fall by these males and females born in early spring having a certain genotype in their genome before committing suicide by doing the possible to prevent them from killing other individuals such as mates and children before committing suicide in late summer and early fall. Also, according to the theory, individuals related to these numerous males and females born in early spring deceased after having committed suicide following their murder of other individuals in late summer and early fall can have in their reproductive cells the genotypes engendering male and females descendants born in early spring dying committing suicide following their murder of other individuals in late summer and early fall and can avoid to conceive sons and daughters who will die from this cause and kill other individuals before dying of this cause in late summer and early fall by avoiding to conceive with their reproductive cells containing the proposed genotypes sons and daughters in late spring and early summer (between early June and late August) to avoid the birth of their sons and daughters in late winter and early spring (between early March and late May).

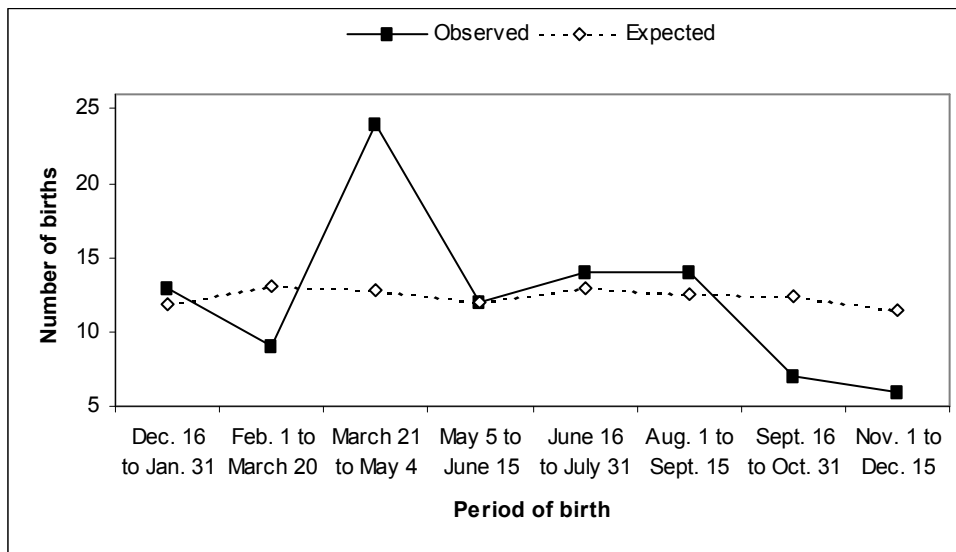
Figure 3. Observed and Expected number of suicides following homicides according to seasonal periods of the year of males and females of the population of the province of Québec born in late winter and early spring (in March, April and May) deceased having committed suicide aged between 23 and 68 years old after having killed other individuals between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Homicide Suicide

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering males who are dying committing suicide following their murder of females, females and children or children following a birth in different seasonal periods and the numerous males of the population of Québec born in early spring (between March 21 and May 4, $\chi^2(1) = 9,65 p < 0,01$) deceased after having committed suicide following their murder of females, females and children or children presented on Figure 4 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering males dying committing suicide after their murder of females, females and children or children following a birth in early spring. According to the theory, it can be predicted that males born in early spring related to the numerous males born in early spring deceased after having committed suicide following their murder of females, females and children or children having in their genome such a genotype will likely die committing suicide following their murder of females, females and children or children. According to the theory, it is possible to prevent the murders perpetrated by these males born in early spring before committing suicide having in their genome a proposed genotype by doing the possible to prevent them from killing females, females and children or children before committing suicide. Also, according to the theory, individuals related to these numerous males born in early spring deceased after having committed suicide following their murder of females, females and children or children can have in their reproductive cells the genotypes engendering male descendants born in early spring dying committing suicide following their murder of females, females and children or children and can avoid to conceive sons who will die from this cause and kill females, females and children or children before dying of this cause by avoiding to conceive with their reproductive cells containing the proposed genotypes sons in early summer (between late June and early August) to avoid the birth of their sons and daughters in early spring (between late March and early May).

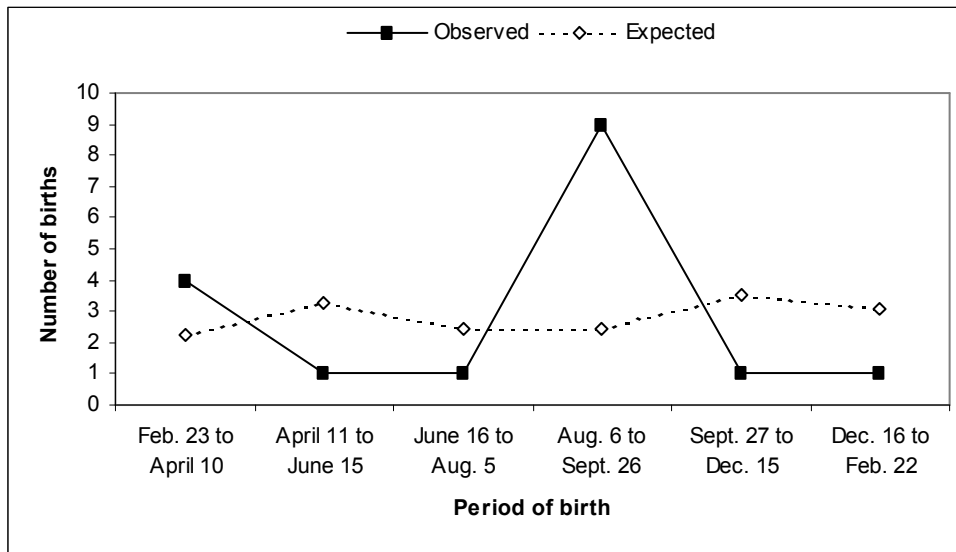
Figure 4. Observed and Expected number of births according to seasonal periods of the year of males of the population of the province of Québec deceased having committed suicide aged between 23 and 68 years old after having killed females, females and children or children between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Homicide Suicide

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering adults who are dying committing suicide following their murder of adolescents born in different seasonal periods following a birth in different seasonal periods and the numerous adolescents born in late summer and early fall (between August 6 and September 26, $\chi^2 = 17,39$ $p < 0,001$) of the population of the province of Québec deceased assassinated by adults deceased after having committed suicide following their murder of adolescents presented on Figure 5 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering adults dying committing suicide after their murder of adolescents born in late summer and early fall. According to the theory, it can be predicted that adults born in a certain seasonal period having in their genome a certain genotype related to adults born in the seasonal period deceased after having committed suicide following their murder of adolescents born in late summer and early fall will likely die committing suicide following their murder of adolescents born in late summer and early fall. According to the theory, it is possible to prevent the murders of adolescents born in late summer and early fall perpetrated by these adults before committing suicide having in their genome a proposed genotype by doing the possible to prevent them from killing adolescents born in late summer and early fall before committing suicide. Also, according to the theory, individuals related to the adults deceased after having committed suicide following their murder of adolescents born in late summer and early fall can have in their reproductive cells the genotypes engendering descendants dying committing suicide following their murder of adolescents born in late summer and early fall and can avoid to conceive sons and daughters who will die from this cause and kill adolescents before dying of this cause by avoiding to conceive with their reproductive cells containing the proposed genotypes sons and daughters nine months before the seasonal period of birth of relatives who have killed adolescents born in late summer and early fall before committing suicide to avoid the birth of their sons and daughters during the seasonal period.

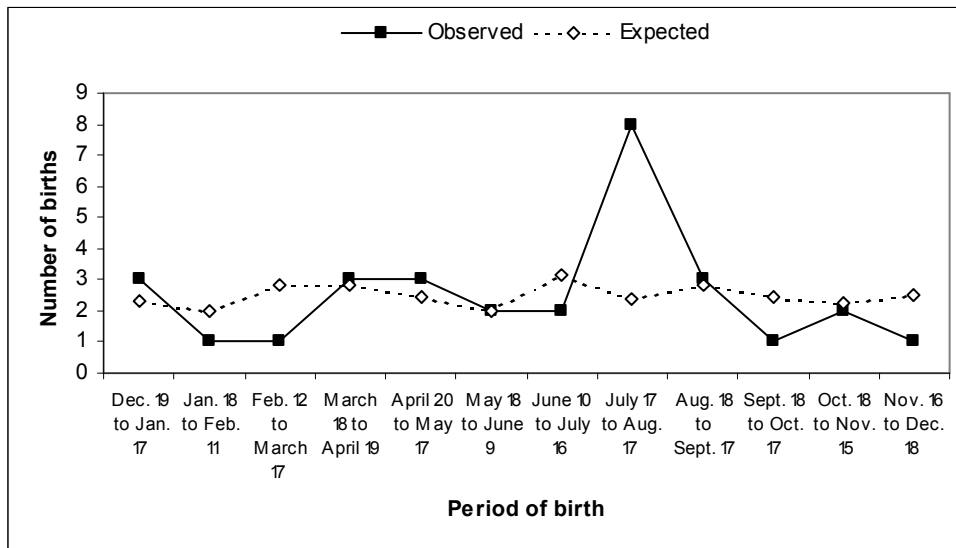
Figure 5. Observed and Expected number of births according to seasonal periods of the year of adolescents of the population of the province of Québec deceased aged between 10 and 17 years old assassinated by adults who have committed suicide following their murder between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Homicide Suicide

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering young males who are dying committing suicide with a firearm following their murder of other individuals with a firearm following a birth in different seasonal periods and the numerous young males of the population of the province of Québec deceased after having committed suicide with a firearm following their murder of other individuals mainly with a firearm born in summer (between July 17 and August 17, $\chi^2(1) = 13,07$ $p < 0,001$) presented on Figure 6 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering young males dying committing suicide with a firearm after their murder of other individuals with a firearm following a birth in summer. According to the theory, it can be predicted that young males born in summer related to the numerous young males born in summer deceased after having committed suicide with a firearm following their murder of other individuals mainly with a firearm having in their genome such a genotype will likely die committing suicide with a firearm following their murder of other individuals with a firearm. According to the theory, it is possible to prevent the murders perpetrated mainly with a firearm by these young males born in summer before committing suicide with a firearm having in their genome a proposed genotype by doing the possible to prevent them from killing with a firearm other individuals, such as young males and young females, the prime targets of these young males, before committing suicide with a firearm. Also, according to the theory, individuals related to these numerous young males born in summer deceased after having committed suicide with a firearm following their murder of other individuals mainly with a firearm can have in their reproductive cells the genotypes engendering young male descendants born in summer dying committing suicide with a firearm following their murder of other individuals with a firearm and can avoid to conceive sons who will die from this cause and kill other individuals with a firearm before dying of this cause by avoiding to conceive with their reproductive cells containing the proposed genotypes sons in fall (between mid-October and mid-November) to avoid the birth of their sons in summer (between mid-July and mid-August).

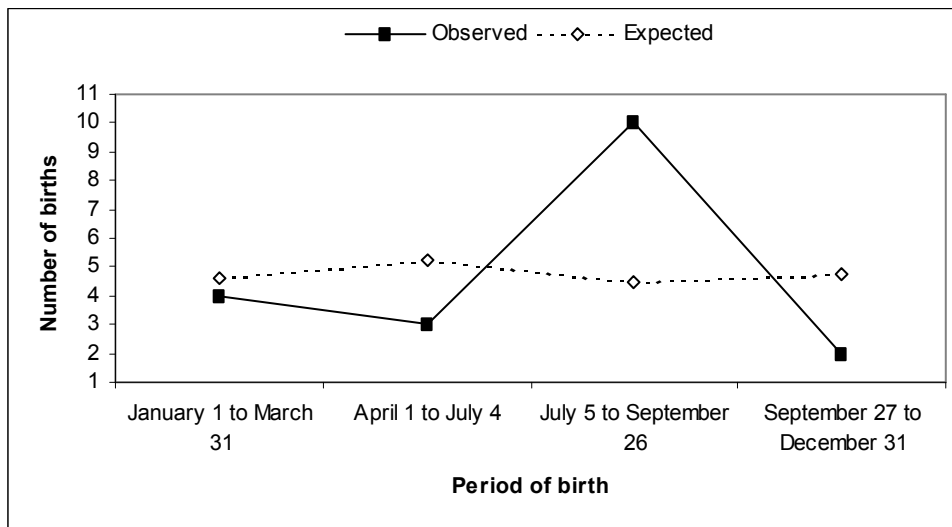
Figure 6. Observed and expected number of births according to seasonal periods of the year of males of the population of the province of Québec deceased after having committed suicide with a firearm following their murder of other individuals, mainly with a firearm, mainly young males and young females, aged between 20 and 38 years old between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Homicide Suicide

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering young males who are dying committing suicide with a firearm following their murder of young females born in different seasonal periods following a birth in different seasonal periods and the numerous young females born in summer (between July 5 and September 26, $\chi^2 = 6,96$ $p < 0,01$) of the population of the province of Québec deceased assassinated by young males deceased after having committed suicide with a firearm following their murder of young females presented on Figure 7 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering young males dying committing suicide with a firearm after their murder of young females born in summer. According to the theory, it can be predicted that young males related to the numerous young males deceased after having committed suicide with a firearm following their murder of young females born in summer having in their genome such a genotype will likely die committing suicide with a firearm following their murder of young females born in summer. According to the theory, it is possible to prevent the murders of young females born in summer perpetrated by these young males before committing suicide with a firearm having in their genome a proposed genotype by doing the possible to prevent them from killing young females born in summer. Also, according to the theory, individuals related to these young males deceased after having committed suicide with a firearm following their murder of young females born in summer can have in their reproductive cells the genotypes engendering young male descendants dying committing suicide with a firearm following their murder of young females born in summer and can avoid to conceive sons who will die from this cause and kill young females born in summer before dying of this cause by avoiding to conceive with their reproductive cells containing the proposed genotypes sons nine months before the seasonal period of birth of the young male relatives who have killed young females born in summer before committing suicide with a firearm to avoid the birth of their sons during the seasonal period.

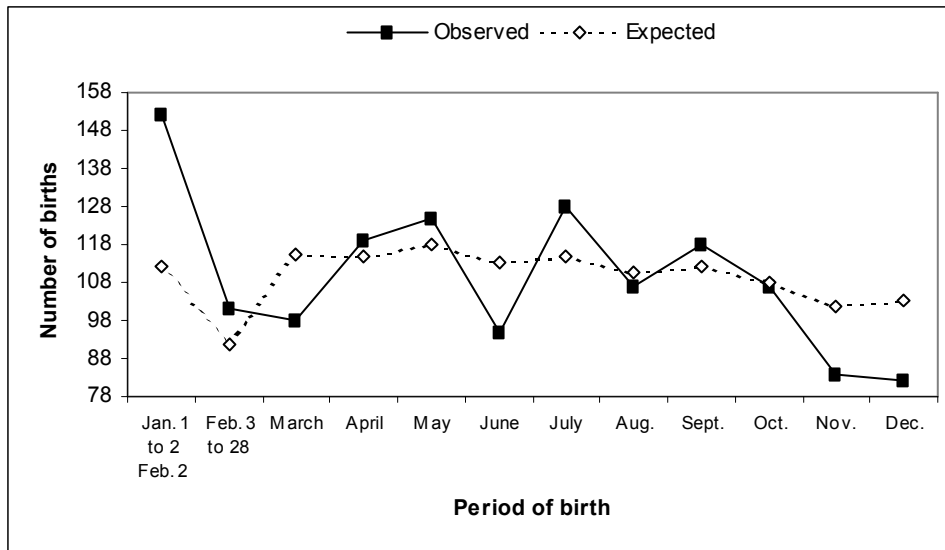
Figure 7. Observed and Expected number of births according to seasonal periods of the year of females of the population of the province of Québec deceased assassinated mainly with a firearm aged between 4 and 38 years old by young males who have committed suicide with a firearm following their murder between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Car Car Colliding

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering males and females who are dying driving a car after a colliding with another car following a birth in different seasonal periods and the numerous males and females of the population of the province of Québec deceased driving a car after a colliding with another car born in winter (between January 1 and February 2, $\chi^2 (1) = 14,93$ $p < 0,001$) presented on Figure 8 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering males and females dying driving a car after a colliding with another car following a birth in winter. According to the theory, it can be predicted that males and females born in winter related to the numerous males and females born in winter deceased driving a car after a colliding with another car having in their genome such genotypes will likely die driving a car after a colliding with another car. According to the theory, it is possible to prevent the death of these males and females born in winter driving a car after a colliding with another car having in their genome a particular genotype and likely the death of eventual other individuals in the car with them and in the other car by preventing these males and females from driving a car if they are displaying signs announcing that they might die of this cause in the future. Also, according to the theory, individuals related to these numerous males and females born in winter deceased driving a car after a colliding with another car can have in their reproductive cells the genotypes engendering male and female descendants born in winter dying driving a car after a colliding with another car and can avoid to conceive sons and daughters who will die from this cause and likely cause the death of other individuals by avoiding to conceive with their reproductive cells containing the proposed genotypes sons and daughters in spring (between early April and early May) to avoid the birth of their sons and daughters in winter (between early January and early February).

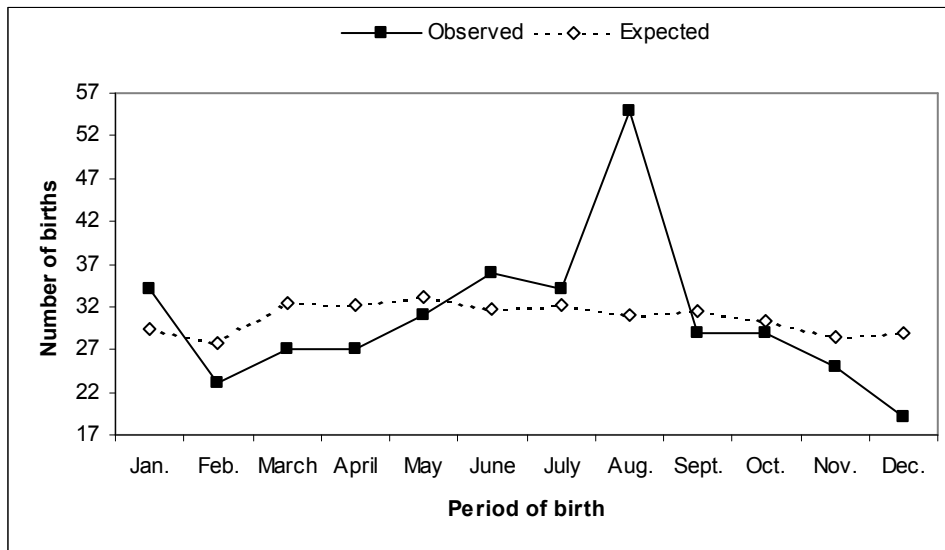
Figure 8. Observed and expected number of births according to seasonal periods of the year of males and females of the population of the province of Québec deceased driving a car after a colliding with another car between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Car Truck Colliding

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering males who are dying driving a car after a colliding with a truck following a birth in different seasonal periods and the numerous males of the population of the province of Québec deceased driving a car after a colliding with a truck born in summer (in August, $\chi^2(1) = 18,59 p < 0,001$) presented on Figure 9 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering males dying driving a car after a colliding with a truck following a birth in summer. According to the theory, it can be predicted that males born in summer related to the numerous males born in summer deceased driving a car after a colliding with a truck having in their genome such genotypes will likely die driving a car after a colliding with a truck. According to the theory, it is possible to prevent the death of these males born in summer driving a car after a colliding with a truck having in their genome a proposed genotype and likely the death of eventual other individuals in the car with them by preventing these males from driving a car if they are displaying signs announcing that they might die of this cause in the future. Also, according to the theory, individuals related to these numerous males born in summer deceased driving a car after a colliding with a truck can have in their reproductive cells the genotypes engendering male descendants born in summer dying driving a car after a colliding with a truck and can avoid to conceive sons who will die from this cause and likely cause the death of other individuals by avoiding to conceive with their reproductive cells containing the proposed genotypes sons in fall (in November) to avoid the birth of their sons in summer (in August).

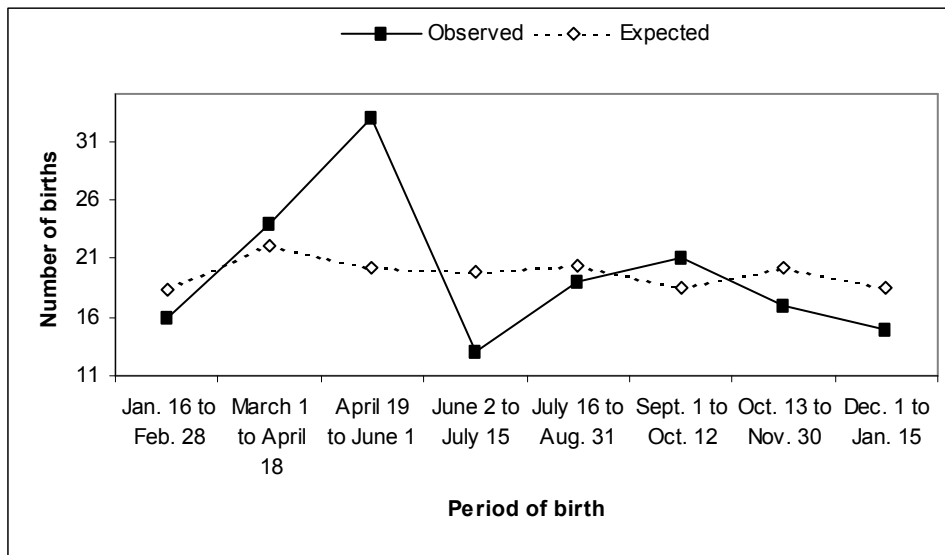
Figure 9. Observed and expected number of births according to seasonal periods of the year of males of the population of the province of Québec deceased driving a car after a colliding with a truck aged between 26 and 43 years old between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Car Truck Colliding

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering young females who are dying driving a car after a colliding with a truck following a birth in different seasonal periods and the numerous young females of the population of the province of Québec deceased driving a car after a colliding with a truck born in spring (between April 19 and June 1, $\chi^2(1) = 8,18$ $p < 0,01$) presented on Figure 10 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering young females dying driving a car after a colliding with a truck following a birth in spring. According to the theory, it can be predicted that young females born in spring related to the numerous young females born in spring deceased driving a car after a colliding with a truck having in their genome such genotypes will likely die driving a car after a colliding with a truck. According to the theory, it is possible to prevent the death of these young females born in spring driving a car after a colliding with a truck having in their genome a proposed genotype and likely the death of eventual other individuals in the car with them by preventing these young females from driving a car if they are displaying signs announcing that they might die of this cause in the future. Also, according to the theory, individuals related to these numerous young females born in spring deceased driving a car after a colliding with a truck can have in their reproductive cells the genotypes engendering female descendants born in spring dying driving a car after a colliding with a truck and can avoid to conceive daughters who will die from this cause and likely cause the death of other individuals by avoiding to conceive with their reproductive cells containing the proposed genotypes daughters in summer (between late July and early September) to avoid the birth of their daughters in spring (between late April and early June).

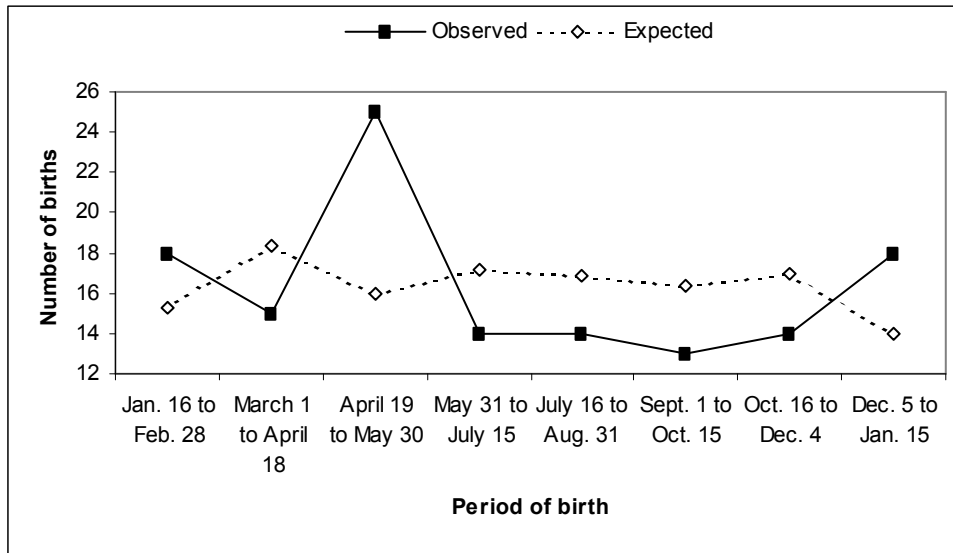
Figure 10. Observed and expected number of births according to seasonal periods of the year of young females of the population of the province of Québec deceased driving a car after a colliding with a truck aged between 17 and 31 years old between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Truck Truck Colliding

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering males who are dying driving a truck after a colliding with another truck following a birth in different seasonal periods and the numerous males of the population of the province of Québec deceased driving a truck after a colliding with another truck born in spring (between April 19 and May 30, $\chi^2(1) = 5,12 p < 0,05$) presented on Figure 11 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering males dying driving a truck after a colliding with another truck following a birth in spring. According to the theory, it can be predicted that males born in spring related to the numerous males born in spring deceased driving a truck after a colliding with another truck having in their genome such genotypes will likely die driving a truck after a colliding with another truck. According to the theory, it is possible to prevent the death of these males born in spring driving a truck after a colliding with another truck having in their genome a proposed genotype and likely the death of eventual individuals in the truck with them and in the other truck by preventing these males from driving a truck if they are displaying signs announcing that they might die of the cause in the future. Also, according to the theory, individuals related to these numerous males born in spring deceased driving a truck after a colliding with another truck can have in their reproductive cells the genotypes engendering male descendants born in spring dying driving a truck after a colliding with another truck and can avoid to conceive sons who will die from this cause and likely cause the death of other individuals by avoiding to conceive with their reproductive cells containing the proposed genotypes sons in summer (between late July and late August) to avoid the birth of their sons in spring (between late April and late May).

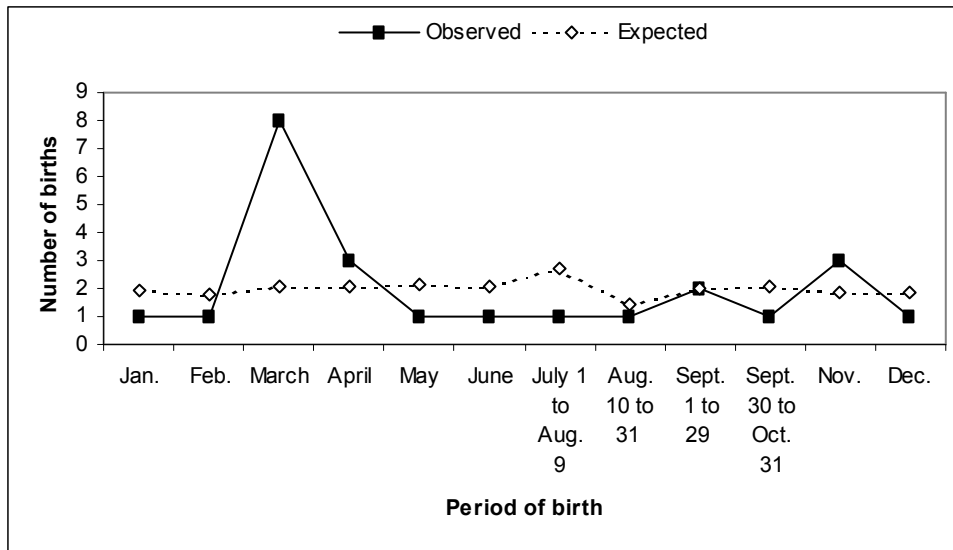
Figure 11. Observed and expected number of births according to seasonal periods of the year of males of the population of the province of Québec deceased driving a truck after a colliding with another truck aged between 31 and 52 years old between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Truck Truck Colliding

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering females who are dying driving a truck after a colliding with another truck following a birth in different seasonal periods and the numerous females of the population of the province of Québec deceased driving a truck after a colliding with another truck born in late winter and early spring (in March, $\chi^2(1) = 16,54$ $p < 0,001$) presented on Figure 12 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering females dying driving a truck after a colliding with another truck following a birth in late winter and early spring. According to the theory, it can be predicted that females born in late winter and early spring related to the numerous females born in late winter and early spring deceased driving a truck after a colliding with another truck having in their genome such genotypes will likely die driving a truck after a colliding with another truck. According to the theory, it is possible to prevent the death of these females born in late winter and early spring driving a truck after a colliding with another truck having in their genome a particular genotype and likely the death of eventual other individuals in the truck with them and in the other truck by preventing these females from driving a truck if they are displaying signs announcing that they might die of the cause in the future. Also, according to the theory, individuals related to these numerous females born in late winter and early spring deceased driving a truck after a colliding with another truck can have in their reproductive cells the genotypes engendering female descendants born in late winter and early spring dying driving a truck after a colliding with another truck and can avoid to conceive daughters who will die from this cause and likely cause the death of other individuals by avoiding to conceive with their reproductive cells containing the proposed genotypes daughters in late spring and early summer (in June) to avoid the birth of their daughters in late winter and early spring (in March).

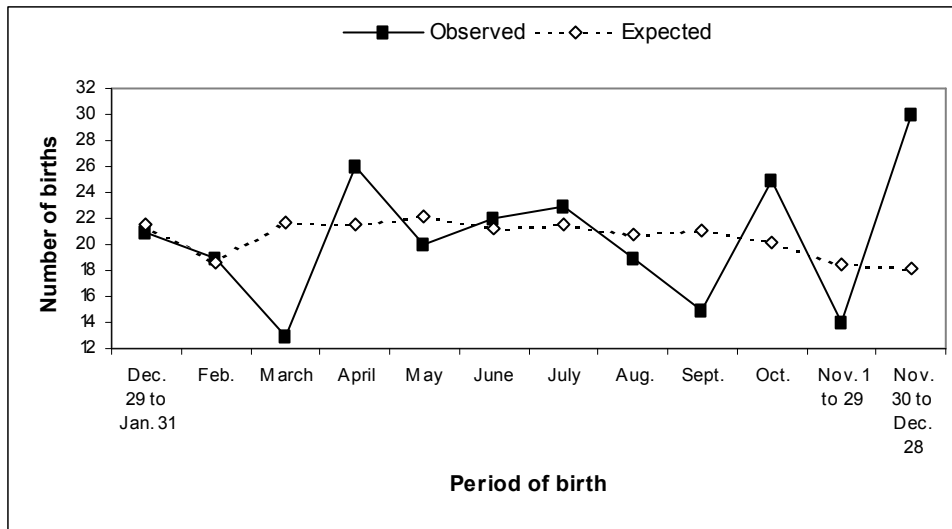
Figure 12. Observed and expected number of births according to seasonal periods of the year of females of the population of the province of Québec deceased driving a truck after a colliding with another truck between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Motorbike Car Colliding

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering males who are dying driving a motorbike after a colliding with a car following a birth in different seasonal periods and the numerous males of the population of the province of Québec deceased driving a motorbike after a colliding with a car born in late fall and early winter (between November 30 and December 28, $\chi^2(1) = 7,70$ $p < 0,01$) presented on Figure 13 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering males dying driving a motorbike after a colliding with a car following a birth in late fall and early winter. According to the theory, it can be predicted that males born in late fall and early winter related to the numerous males born in late fall and early winter deceased driving a motorbike after a colliding with a car having in their genome such genotypes will likely die driving a motorbike after a colliding with a car. According to the theory, it is possible to prevent the death of these males born in late fall and early winter driving a motorbike after a colliding with a car having in their genome a proposed genotype and likely the death of eventual individuals on the motorbike with them by preventing these males from driving a motorbike if they are displaying signs announcing that they might die of the cause in the future. Also, according to the theory, individuals related to these numerous males born in late fall and early winter deceased driving a motorbike after a colliding with a car can have in their reproductive cells the genotypes engendering male descendants born in late fall and early winter dying driving a motorbike after a colliding with a car and can avoid to conceive sons who will die from this cause and likely cause the death of other individuals by avoiding to conceive with their reproductive cells containing the proposed genotypes sons in late winter and early spring (between early and late March) to avoid the birth of their sons in late fall and early winter (between late November and late December).

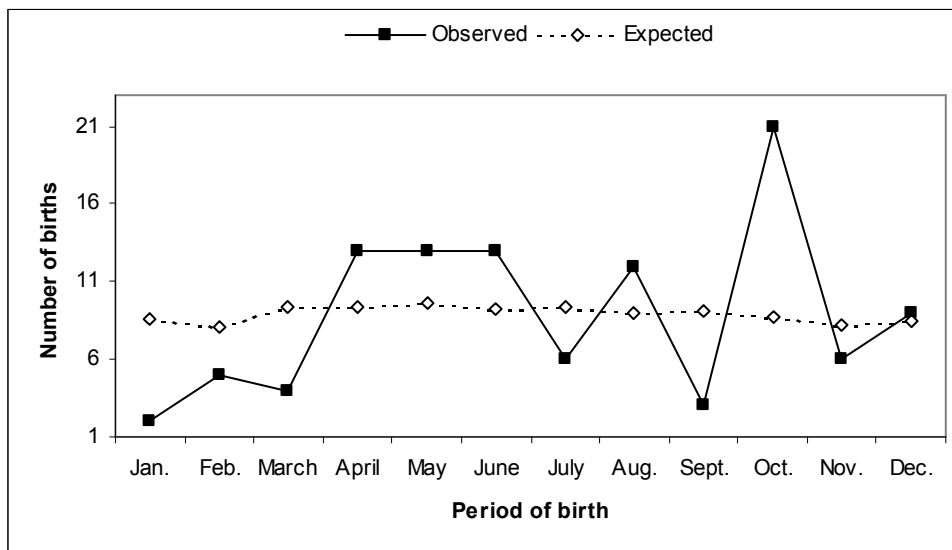
Figure 13. Observed and expected number of births according to seasonal periods of the year of males of the population of the province of Québec deceased driving a motorbike after a colliding with a car aged between 19 and 51 years old between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Motorbike Truck Colliding

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering males who are dying driving a motorbike after a colliding with a truck following a birth in different seasonal periods and the numerous males of the population of the province of Québec deceased driving a motorbike after a colliding with a truck born in fall (in October, $\chi^2(1) = 17,09$ $p < 0,001$) presented on Figure 14 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering males dying driving a motorbike after a colliding with a truck following a birth in fall. According to the theory, it can be predicted that males born in fall related to the numerous males born in fall deceased driving a motorbike after a colliding with a truck having in their genome such genotypes will likely die driving a motorbike after a colliding with a truck. According to the theory, it is possible to prevent the death of these males born in fall driving a motorbike after a colliding with a truck having in their genome a proposed genotype and likely the death of eventual individuals on the motorbike with them by preventing these males from driving a motorbike if they are displaying signs announcing that they might die of the cause in the future. Also, according to the theory, individuals related to these numerous males born in fall deceased driving a motorbike after a colliding with a truck can have in their reproductive cells the genotypes engendering male descendants born in fall dying driving a motorbike after a colliding with a truck and can avoid to conceive sons who will die from this cause and likely cause the death of other individuals by avoiding to conceive with their reproductive cells containing the proposed genotypes sons in winter (in January) to avoid the birth of their sons in fall (in October).

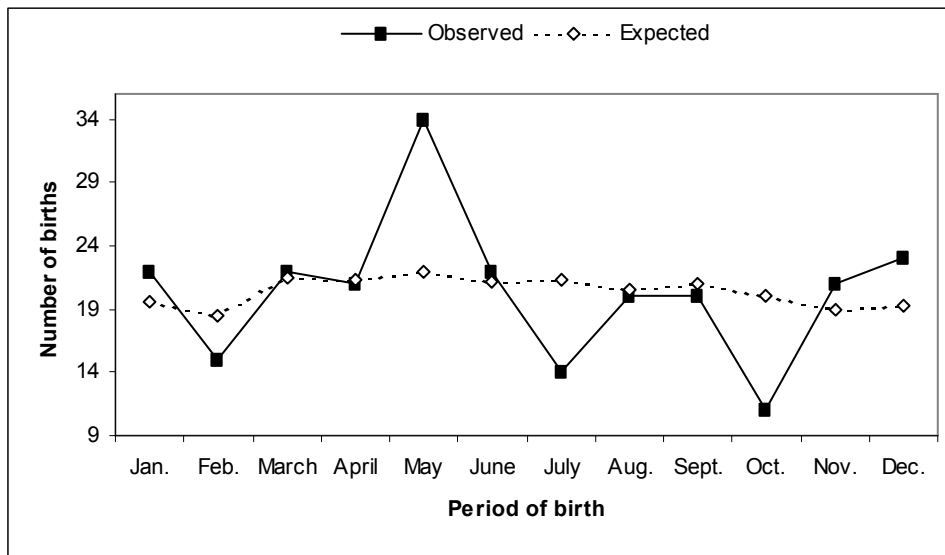
Figure 14. Observed and expected number of births according to seasonal periods of the year of males of the population of the province of Québec deceased driving a motorbike after a colliding with a truck aged between 18 and 50 years old between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Car Solid Fixed Structure

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering young males who are dying driving a car after a colliding with a solid fixed structure following a birth in different seasonal periods and the numerous young males of the population of the province of Québec deceased driving a car after a colliding with a solid fixed structure born in spring (in May, $\chi^2(1) = 6,54$ $p < 0,05$) presented on Figure 15 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering young males dying driving a car after a colliding with a solid fixed structure following a birth in spring. According to the theory, it can be predicted that young males born in spring related to the numerous young males born in spring deceased driving a car after a colliding with a solid fixed structure having in their genome such a genotype will likely die driving a car after a colliding with a solid fixed structure. According to the theory, it is possible to prevent the death of these young males born in spring driving a car after a colliding with a solid fixed structure having in their genome a proposed genotype and likely the death of eventual individuals in the car with them by preventing these young males from driving a car, if they are displaying signs of being likely to die of this cause in the future. Also, according to the theory, individuals related to these numerous young males born in spring deceased driving a car after a colliding with a solid fixed structure can have in their reproductive cells the genotypes engendering young male descendants born in spring dying driving a car after a colliding with a solid fixed structure and can avoid to conceive sons who will die from this cause and likely cause the death of other individuals by avoiding to conceive with their reproductive cells containing a proposed genotype sons in summer (in August) to avoid the birth of their sons in spring (in May).

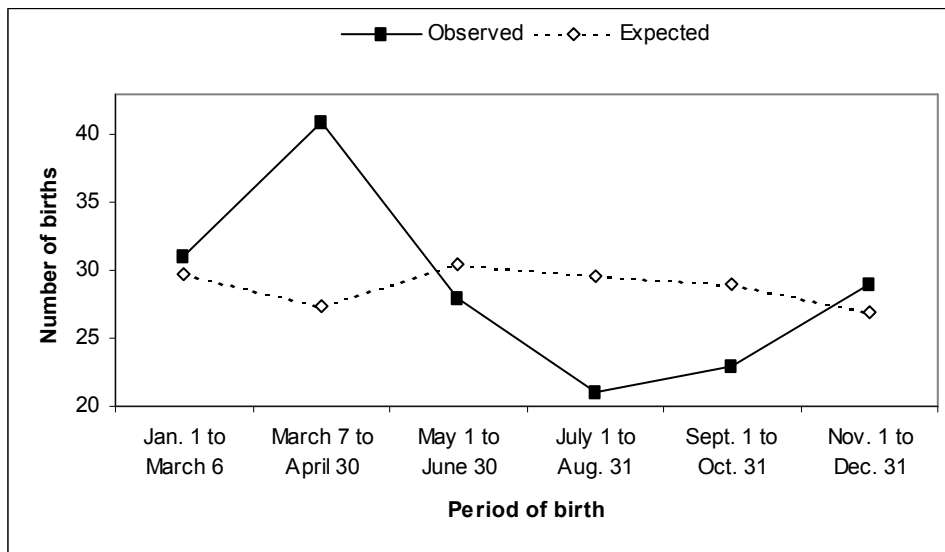
Figure 15. Observed and expected number of births according to seasonal periods of the year of males of the population of the province of Québec deceased driving a car after a colliding with a solid fixed structure aged between 21 and 26 years old between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Car Solid Fixed Structure

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering females who are dying driving a car after a colliding with a solid fixed structure following a birth in different seasonal periods and the numerous females of the population of the province of Québec deceased driving a car after a colliding with a solid fixed structure born in late winter and early spring (between March 7 and April 30, $\chi^2(1) = 6,85$ $p < 0,01$) presented on Figure 16 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering females dying driving a car after a colliding with a solid fixed structure following a birth in late winter and early spring. According to the theory, it can be predicted that females born in late winter and early spring related to the numerous females born in late winter and early spring deceased driving a car after a colliding with a solid fixed structure having in their genome such a genotype will likely die driving a car after a colliding with a solid fixed structure. According to the theory, it is possible to prevent the death of these females born in late winter and early spring driving a car after a colliding with a solid fixed structure having in their genome a proposed genotype and likely the death of the eventual individuals in the car with them by preventing these females from driving a car, if they are displaying signs of being likely to die of this cause in the future. Also, according to the theory, individuals related to these numerous females born in late winter and early spring deceased driving a car after a colliding with a solid fixed structure can have in their reproductive cells the genotypes engendering young female descendants born in late winter and early spring dying driving a car after a colliding with a solid fixed structure and can avoid to conceive daughters who will die from this cause and likely cause the death of other individuals by avoiding to conceive with their reproductive cells containing a proposed genotype daughters in late spring and early summer (between early June and late July) to avoid the birth of their daughters in late winter and early spring (between early March and late April).

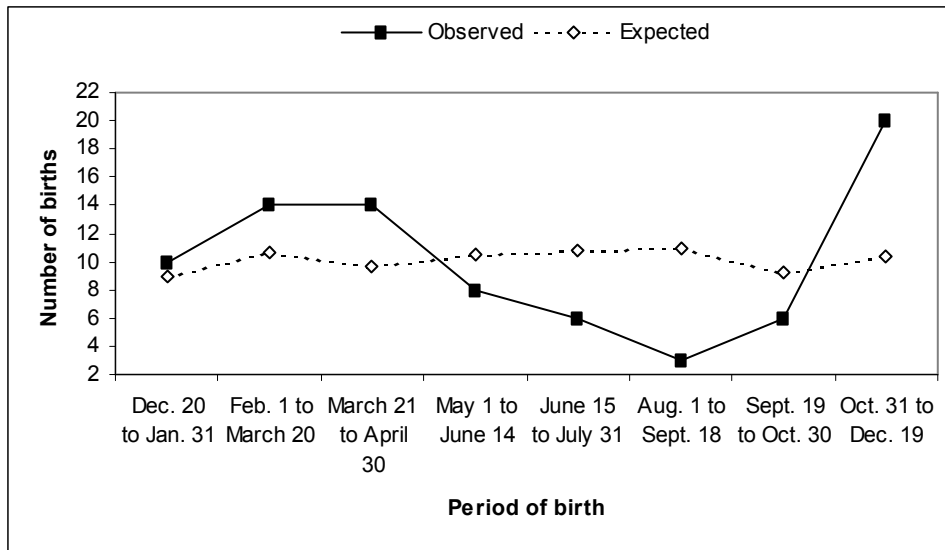
Figure 16. Observed and expected number of births according to seasonal periods of the year of females of the population of the province of Québec deceased driving a car after a colliding with a solid fixed structure aged between 18 and 64 years old between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Car Solid Fixed Structure

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering young females who are dying driving a car after a colliding with a solid fixed structure following a birth in different seasonal periods and the numerous young females of the population of the province of Québec deceased driving a car after a colliding with a solid fixed structure born in late fall (between October 31 and December 19, $\chi^2(1) = 8,94$ $p < 0,01$) presented on Figure 17 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering young females dying driving a car after a colliding with a solid fixed structure following a birth in late fall. According to the theory, it can be predicted that young females born in late fall related to the numerous young females born in late fall deceased driving a car after a colliding with a solid fixed structure having in their genome such a genotype will likely die driving a car after a colliding with a solid fixed structure. According to the theory, it is possible to prevent the death of these young females born in late fall driving a car after a colliding with a solid fixed structure having in their genome a proposed genotype and likely the death of eventual individuals in the car with them by preventing these young females from driving a car, if they are displaying signs of being likely to die of this cause in the future. Also, according to the theory, individuals related to these numerous young females born in late fall deceased driving a car after a colliding with a solid fixed structure can have in their reproductive cells the genotypes engendering young female descendants born in late fall dying driving a car after a colliding with a solid fixed structure and can avoid to conceive daughters who will die from this cause and likely cause the death of other individuals by avoiding to conceive with their reproductive cells containing a proposed genotype daughters in late winter (between late January and late March) to avoid the birth of their daughters in late fall (between late October and late December).

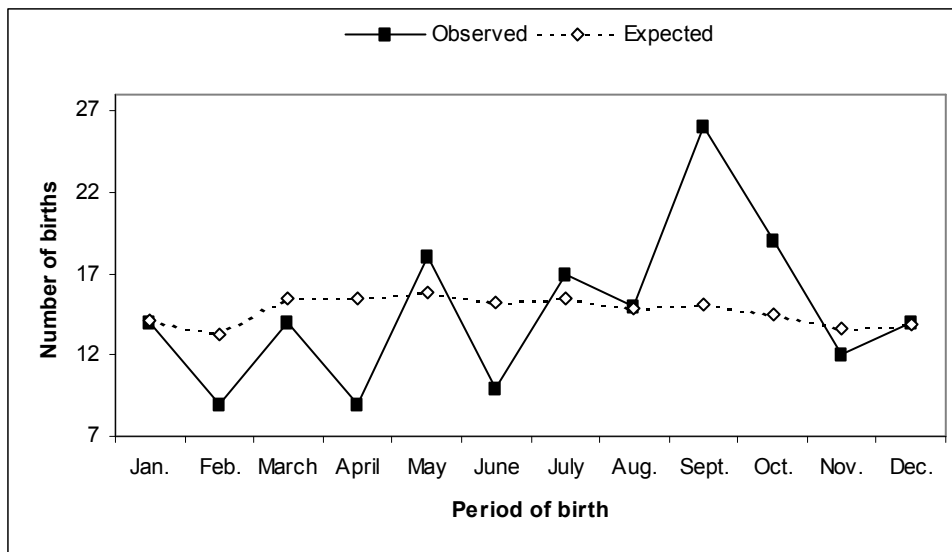
Figure 17. Observed and expected number of births according to seasonal periods of the year of females of the population of the province of Québec deceased driving a car after a colliding with a solid fixed structure aged between 18 and 29 years old between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Truck Solid Fixed Structure

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering males who are dying driving a truck after a colliding with a solid fixed structure following a birth in different seasonal periods and the numerous males of the population of the province of Québec deceased driving a truck after a colliding with a solid fixed structure born in late summer and early fall (in September, $\chi^2 (1) = 7,84$ $p < 0,01$) presented on Figure 18 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering males dying driving a truck after a colliding with a solid fixed structure following a birth in late summer and early fall. According to the theory, it can be predicted that males born in late summer and early fall related to the numerous males born in late summer and early fall deceased driving a truck after a colliding with a solid fixed structure having in their genome such a genotype will likely die driving a truck after a colliding with a solid fixed structure. According to the theory, it is possible to prevent the death of these males born in late summer and early fall driving a truck after a colliding with a solid fixed structure having in their genome a proposed genotype and likely the death of the eventual individuals in the truck with them by preventing these males from driving a truck, if they are displaying signs of being likely to die of this cause in the future. Also, according to the theory, individuals related to these numerous males born in late summer and early fall deceased driving a truck after a colliding with a solid fixed structure can have in their reproductive cells the genotypes engendering male descendants born in late summer and early fall dying driving a truck after a colliding with a solid fixed structure and can avoid to conceive sons who will die from this cause and likely cause the death of other individuals by avoiding to conceive with their reproductive cells containing a proposed genotype sons in late fall and early winter (in December) to avoid the birth of their sons in late summer and early fall (in September).

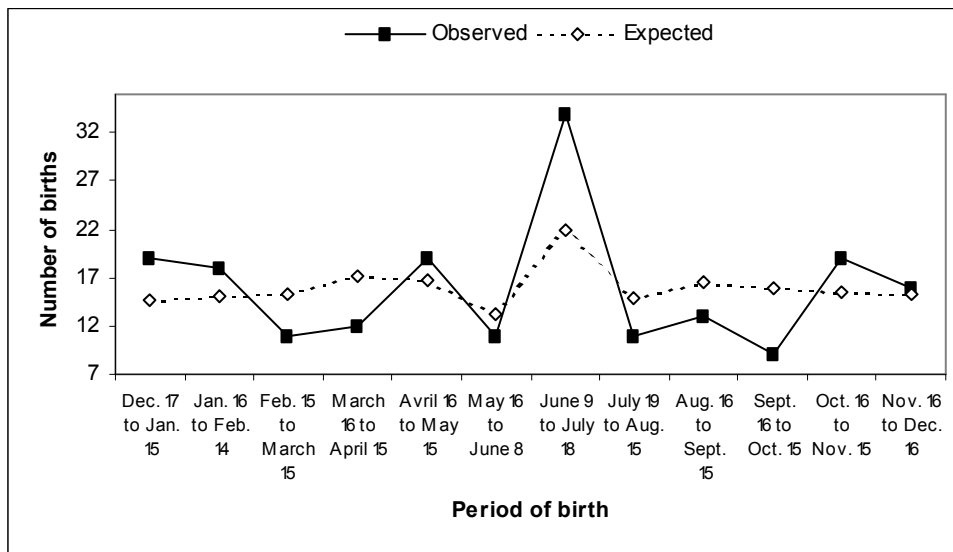
Figure 18. Observed and expected number of births according to seasonal periods of the year of males of the population of the province of Québec deceased driving a truck after a colliding with a solid fixed structure between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Motorbike Solid Fixed Structure

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering males who are dying driving a motorbike after a colliding with a solid fixed structure following a birth in different seasonal periods and the numerous males of the population of the province of Québec deceased driving a motorbike after a colliding with a solid fixed structure born in late spring and early summer (between June 9 and July 18, $\chi^2(1) = 6,77$ $p < 0,01$) presented on Figure 19 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering males dying driving a motorbike after a colliding with a solid fixed structure following a birth in late spring and early summer. According to the theory, it can be predicted that males born in late spring and early summer related to the numerous males born in late spring and early summer deceased driving a motorbike after a colliding with a solid fixed structure having in their genome such a genotype will likely die driving a motorbike after a colliding with a solid fixed structure. According to the theory, it is possible to prevent the death of these males born in late spring and early summer driving a motorbike after a colliding with a solid fixed structure having in their genome a proposed genotype and likely the death of the eventual individuals on the motorbike with them by preventing these males from driving a motorbike, if they are displaying signs of being likely to die of this cause in the future. Also, according to the theory, individuals related to these numerous males born in late spring and early summer deceased driving a motorbike after a colliding with a solid fixed structure can have in their reproductive cells the genotypes engendering male descendants born in late spring and early summer dying driving a motorbike after a colliding with a solid fixed structure and can avoid to conceive sons who will die from this cause and likely cause the death of other individuals by avoiding to conceive with their reproductive cells containing a proposed genotype sons in late summer and early fall (between early September and late October) to avoid the birth of their sons in late spring and early summer (between early June and late July).

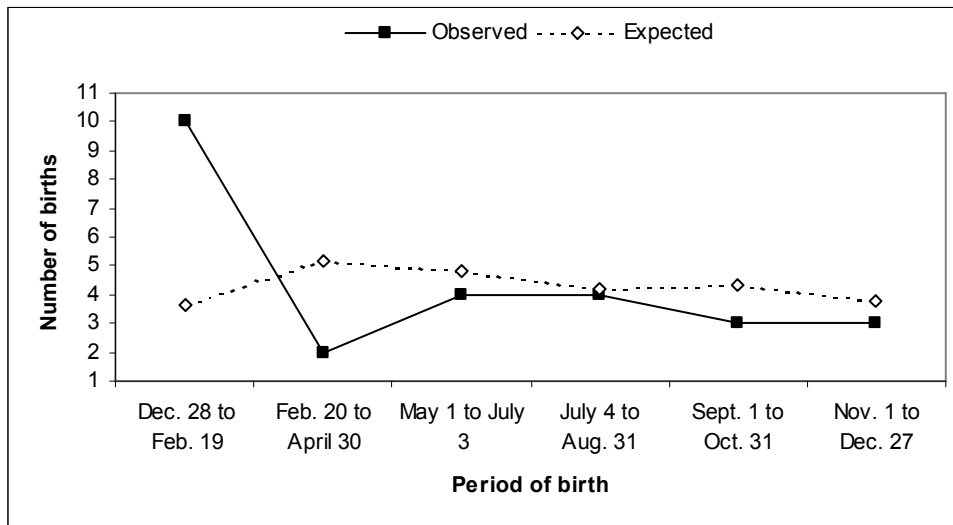
Figure 19. Observed and expected number of births according to seasonal periods of the year of males of the population of the province of Québec deceased driving a motorbike after a colliding with a solid fixed structure between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Car Train Colliding

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering females who are dying in a car on a railway after a colliding with a train following a birth in different seasonal periods and the numerous females of the population of the province of Québec deceased in a car on a railway after a colliding with a train born in winter (between December 28 and February 19, $\chi^2 (1) = 10,98 p < 0,001$) presented on Figure 20 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering females dying in a car on a railway after a colliding with a train following a birth in winter. According to the theory, it can be predicted that females born in winter related to the numerous females born in winter deceased in a car on a railway after a colliding with a train having in their genome such a genotype will likely die in a car on a railway after a colliding with a train. According to the theory, it is possible to prevent the death of these females born in winter in a car on a railway after a colliding with a train having in their genome a proposed genotype and likely the death of eventual individuals in the car with them by preventing these females from being in a car on a railway. Also, according to the theory, individuals related to these numerous females born in winter deceased in a car on a railway after a colliding with a train can have in their reproductive cells the genotypes engendering female descendants born in winter dying in a car on a railway after a colliding with a train and can avoid to conceive daughters who will die from this cause and likely cause the death of other individuals by avoiding to conceive with their reproductive cells containing the proposed genotypes daughters in spring (between late March and late May) to avoid the birth of their daughters in winter (between late December and late February).

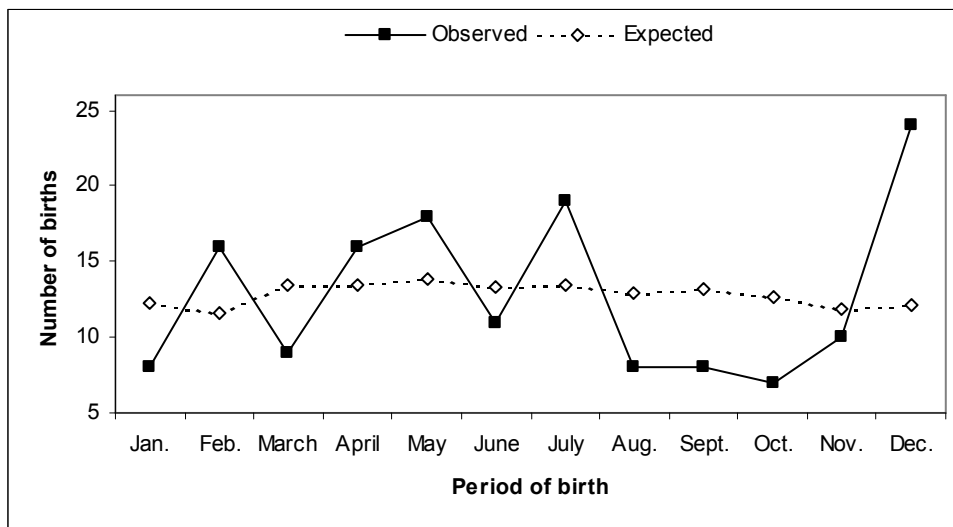
Figure 20. Observed and expected number of births according to seasonal periods of the year of females of the population of the province of Québec deceased in a car on a railway after a colliding with a train between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Truck Overturn

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering males who are dying driving a truck after an overturn following a birth in different seasonal periods and the numerous males of the population of the province of Québec deceased driving a truck after an overturn born in late fall and early winter (in December, $\chi^2 (1) = 11,69$ $p < 0,001$) presented on Figure 21 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering males dying driving a truck after an overturn following a birth in late fall and early winter. According to the theory, it can be predicted that males born in late fall and early winter related to the numerous males born in late fall and early winter deceased driving a truck after an overturn having in their genome such a genotype will likely die driving a truck after an overturn. According to the theory, it is possible to prevent the death of these males born in late fall and early winter driving a truck after an overturn having in their genome a proposed genotype and likely the death of the eventual individuals in the truck with them by preventing these males from driving a truck, if they are displaying signs of being likely to die of this cause in the future. Also, according to the theory, individuals related to these numerous males born in late fall and early winter deceased driving a truck after an overturn can have in their reproductive cells the genotypes engendering male descendants born in late fall and early winter dying driving a truck after an overturn and can avoid to conceive sons who will die from this cause and likely cause the death of other individuals by avoiding to conceive with their reproductive cells containing a proposed genotype sons in late winter and early spring (in March) to avoid the birth of their sons in late fall and early winter (in December).

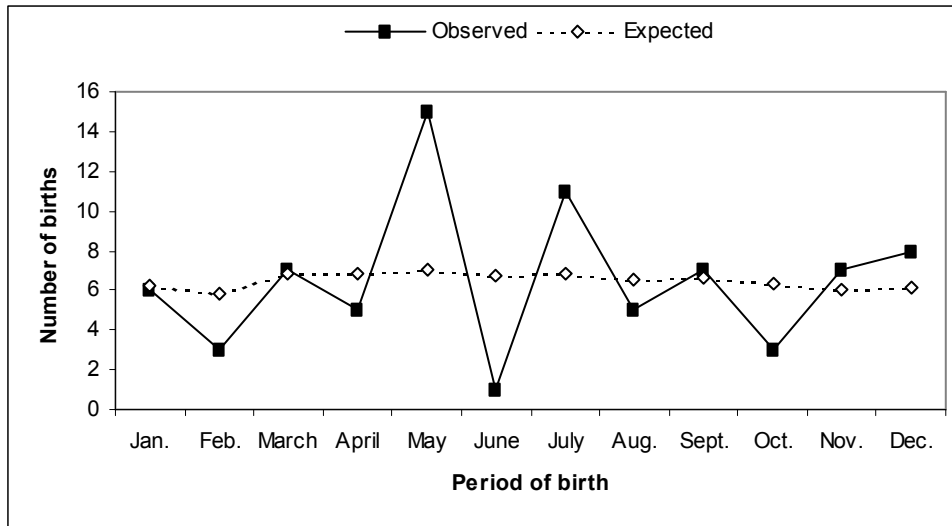
Figure 21. Observed and expected number of births according to seasonal periods of the year of males of the population of the province of Québec deceased driving a truck after an overturn aged between 29 and 59 years old between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Truck Overturn

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering young males who are dying driving a truck after an overturn following a birth in different seasonal periods and the numerous young males of the population of the province of Québec deceased driving a truck after an overturn born in spring (in May, $\chi^2(1) = 9,13$ $p < 0,01$) presented on Figure 22 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering young males dying driving a truck after an overturn following a birth in spring. According to the theory, it can be predicted that young males born in spring related to the numerous young males born in spring deceased driving a truck after an overturn having in their genome such a genotype will likely die driving a truck after an overturn. According to the theory, it is possible to prevent the death of these young males born in spring driving a truck after an overturn having in their genome a proposed genotype and likely the death of the eventual individuals in the truck with them by preventing these young males from driving a truck, if they are displaying signs of being likely to die of this cause in the future. Also, according to the theory, individuals related to these numerous young males born in spring deceased driving a truck after an overturn can have in their reproductive cells the genotypes engendering male descendants born in spring dying driving a truck after an overturn and can avoid to conceive sons who will die from this cause and likely cause the death of other individuals by avoiding to conceive with their reproductive cells containing a proposed genotype sons in summer (in August) to avoid the birth of their sons in spring (in May).

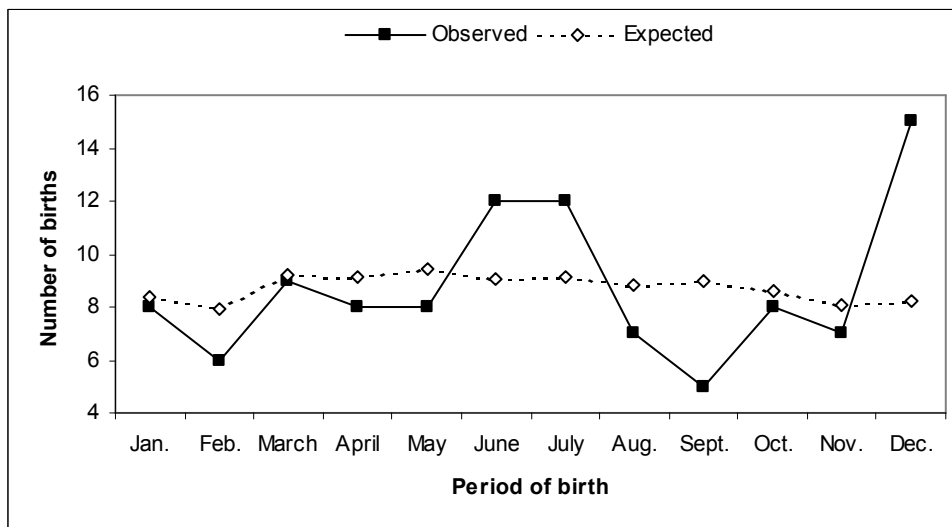
Figure 22. Observed and expected number of births according to seasonal periods of the year of young males of the population of the province of Québec deceased driving a truck after an overturn aged between 22 and 32 years old between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Car Overturn

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering females who are dying driving a car after an overturn following a birth in different seasonal periods and the numerous females of the population of the province of Québec deceased driving a car after an overturn born in late fall and early winter (in December, $\chi^2(1) = 5,52$ $p < 0,05$) presented on Figure 23 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering females dying driving a car after an overturn following a birth in late fall and early winter. According to the theory, it can be predicted that females born in late fall and early winter related to the numerous females born in late fall and early winter deceased driving a car after an overturn having in their genome such a genotype will likely die driving a car after an overturn. According to the theory, it is possible to prevent the death of these females born in late fall and early winter driving a car after an overturn having in their genome a proposed genotype and likely the death of the eventual individuals in the car with them by preventing these females from driving a car, if they are displaying signs of being likely to die of this cause in the future. Also, according to the theory, individuals related to these numerous females born in late fall and early winter deceased driving a car after an overturn can have in their reproductive cells the genotypes engendering female descendants born in late fall and early winter dying driving a car after an overturn and can avoid to conceive daughters who will die from this cause and likely cause the death of other individuals by avoiding to conceive with their reproductive cells containing a proposed genotype daughters in late winter and early spring (in March) to avoid the birth of their daughters in late fall and early winter (in December).

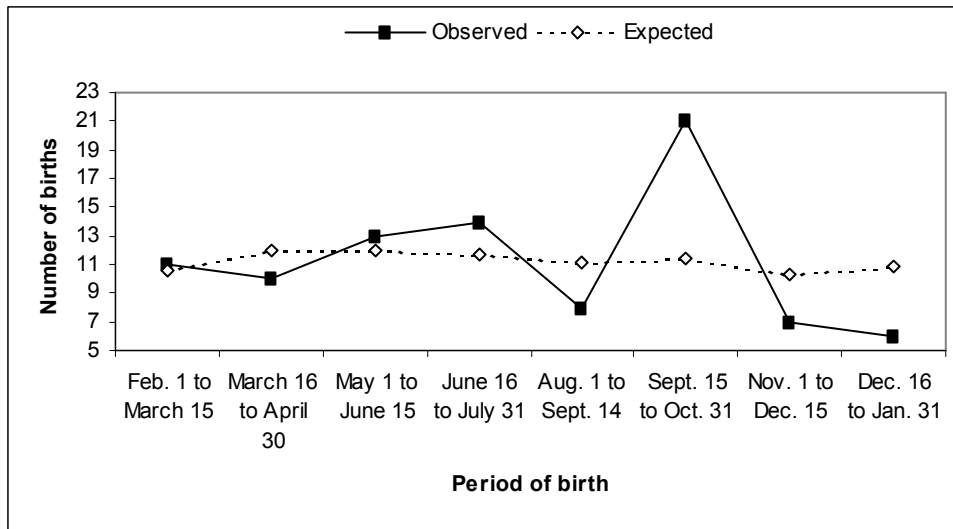
Figure 23. Observed and expected number of births according to seasonal periods of the year of females of the population of the province of Québec deceased driving a car after an overturn aged between 15 and 62 years old between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Motorbike Overturn

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering young males who are dying driving a motorbike after an overturn following a birth in different seasonal periods and the numerous young males of the population of the province of Québec deceased driving a motorbike after an overturn born in late summer and early fall (between September 15 and October 31, $\chi^2(1) = 7,92$ $p < 0,01$) presented on Figure 24 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering young males dying driving a motorbike after an overturn following a birth in late summer and early fall. According to the theory, it can be predicted that young males born in late summer and early fall related to the numerous young males born in late summer and early fall deceased driving a motorbike after an overturn having in their genome such a genotype will likely die driving a motorbike after an overturn. According to the theory, it is possible to prevent the death of these young males born in late summer and early fall driving a motorbike after an overturn having in their genome a proposed genotype and likely the death of the eventual individuals on the motorbike with them by preventing these young males from driving a motorbike, if they are displaying signs of being likely to die of this cause in the future. Also, according to the theory, individuals related to these numerous young males born in late summer and early fall deceased driving a motorbike after an overturn can have in their reproductive cells the genotypes engendering male descendants born in late summer and early fall dying young driving a motorbike after an overturn and can avoid to conceive sons who will die from this cause and likely cause the death of other individuals by avoiding to conceive with their reproductive cells containing a proposed genotype sons in late fall and early winter (between mid-December and late January) to avoid the birth of their sons in late summer and early fall (between mid-September and late October).

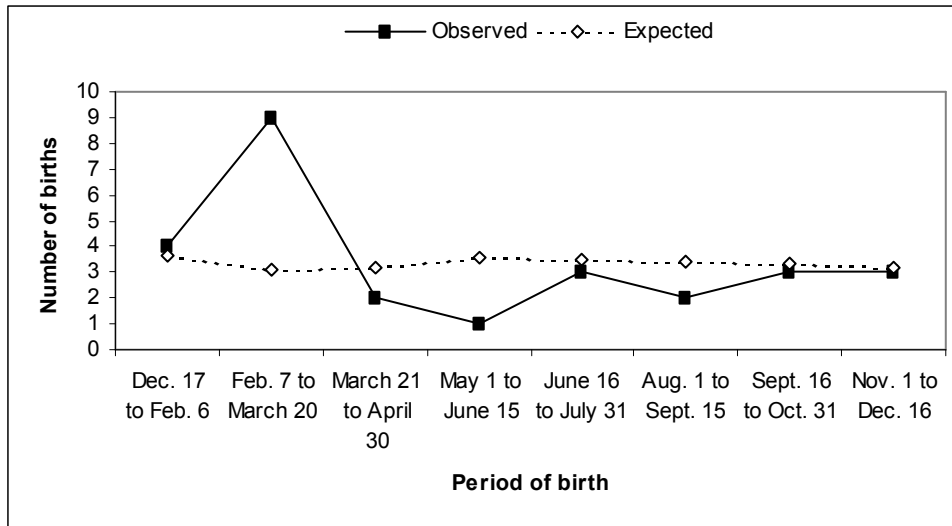
Figure 24. Observed and expected number of births according to seasonal periods of the year of young males of the population of the province of Québec deceased driving a motorbike after an overturn aged between 21 and 40 years old between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Car Fall Trauma

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering males who are dying of a trauma after a fall driving a car following a birth in different seasonal periods and the numerous males of the population of the province of Québec deceased of a trauma after a fall driving a car born in late winter (between February 7 and March 20, $\chi^2(1) = 11,08$ $p < 0,001$) presented on Figure 25 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering males dying of a trauma after a fall driving a car following a birth in late winter. According to the theory, it can be predicted that males born in late winter related to the numerous males born in late winter deceased of a trauma after a fall driving a car having in their genome such a genotype will likely die of a trauma after a fall driving a car. According to the theory, it is possible to prevent the death of these males born in late winter of a trauma after a fall driving a car having in their genome a proposed genotype and likely the death of the eventual individuals in the car with them by preventing these males from driving a car, if they are displaying signs of being likely to die of this cause in the future. Also, according to the theory, individuals related to these numerous males born in late winter deceased of a trauma after a fall driving a car can have in their reproductive cells the genotypes engendering male descendants born in late winter dying of a trauma after a fall driving a car and can avoid to conceive sons who will die from this cause and likely cause the death of other individuals by avoiding to conceive with their reproductive cells containing a proposed genotype sons in late spring (between early May and late June) to avoid the birth of their sons in late winter (between early February and late March).

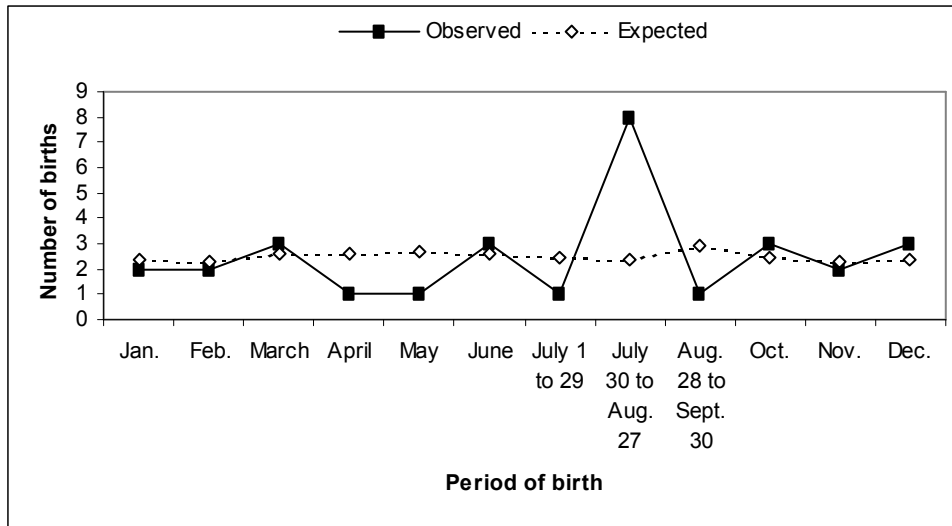
Figure 25. Observed and expected number of births according to seasonal periods of the year of males of the population of the province of Québec deceased of a trauma after a fall driving a car between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Car Fall Drowning

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering females who are dying drowned after a fall driving a car following a birth in different seasonal periods and the numerous females of the population of the province of Québec deceased drowned after a fall driving a car born in summer (between July 30 and August 27, $\chi^2(1) = 13,48$ $p < 0,001$) presented on Figure 26 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering females dying drowned after a fall driving a car following a birth in summer. According to the theory, it can be predicted that females born in summer related to the numerous females born in summer deceased drowned after a fall driving a car having in their genome such a genotype will likely die drowned after a fall driving a car. According to the theory, it is possible to prevent the death of these females born in summer drowned after a fall driving a car having in their genome a proposed genotype and likely the death of the eventual individuals in the car with them by preventing these females from driving a car, if they are displaying signs of being likely to die of this cause in the future. Also, according to the theory, individuals related to these numerous females born in summer deceased drowned after a fall driving a car can have in their reproductive cells the genotypes engendering female descendants born in summer dying drowned after a fall driving a car and can avoid to conceive daughters who will die from this cause and likely cause the death of other individuals by avoiding to conceive with their reproductive cells containing a proposed genotype daughters in fall (between late October and late November) to avoid the birth of their daughters in summer (between late July and late August).

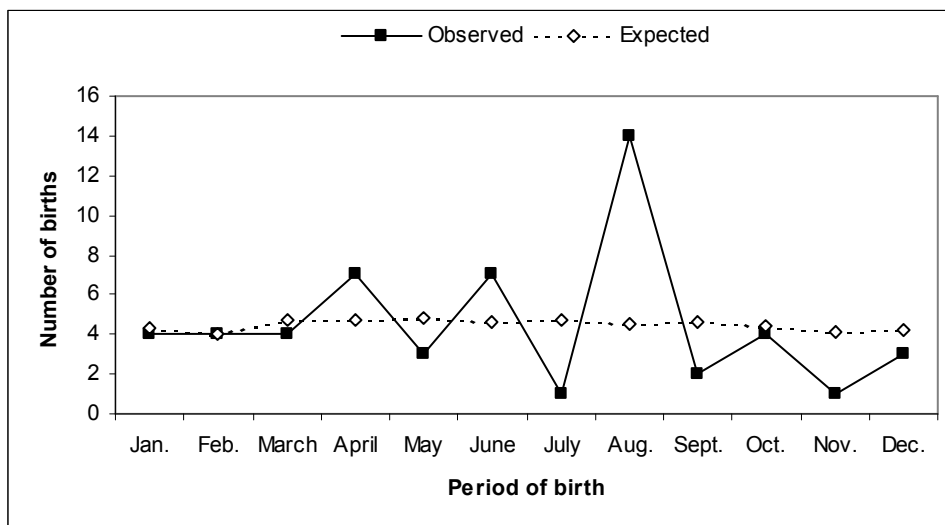
Figure 26. Observed and expected number of births according to seasonal periods of the year of females of the population of the province of Québec deceased drowned after a fall driving a car between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Passenger Car Car Colliding

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering old females who are dying passengers of a car after a colliding with another car following a birth in different seasonal periods and the numerous old females of the population of the province of Québec deceased passengers of a car after a colliding with another car born in summer (in August, $\chi^2(1) = 19,75$ $p < 0,001$) presented on Figure 27 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering old females dying passengers of a car after a colliding with another car following a birth in summer. If these numerous old females born in summer deceased passengers of a car after the colliding of the car with another car behaved to decrease passengers of a car after a colliding of the car with another car, it can be proposed that genotypes engendering old females behaving to die passengers of a car after a colliding of the car with another car following a birth in summer in numerous individuals of the population of Québec explain the observation, if so, it can be predicted that old females born in summer related to the numerous old females born in summer deceased passengers of a car after the colliding of a car with another car having in their genome a particular genotype will die passengers of a car behaving to die of this cause. If so, it might be possible to prevent the death of these old females born in summer having a certain genotype in their genome, as well as the death of other individuals in the car with them and in the other car implicated in the colliding by preventing these old females from behaving to cause their death passengers of a car after a colliding of the car with another car, by preventing them notably from moving the steering wheel of a car in which they are to cause a colliding with another car, if they are displaying signs announcing that they might die of this cause in the future. Also, if genotypes engendering old females dying passengers of a car after a colliding of the car with another car behaving to cause their death of this cause following a birth in summer in numerous individuals of the population of Québec explain the observation, individuals related to these numerous old females born in summer deceased passengers of a car after a colliding with another car can be having in their reproductive cells the genotypes engendering old female descendants born in summer behaving to die passengers of a car after the colliding of the car with another car and can avoid to conceive female descendants who will behave to die old passengers of a car after a colliding with another car by avoiding to conceive with their reproductive cells containing the proposed genotypes daughters in fall (in November) to avoid the birth of their daughters in summer (in August). If these numerous old females born in summer deceased passengers of a car after a colliding with another car have not behaved to cause their death from this cause, it can be proposed that genotypes engendering individuals causing the death of old female passengers of a car born in summer by causing the colliding of a car in which these old females are with another car, as likely drivers of the car, causing also likely their death doing so, in numerous individuals of the population of Québec explain the observation, if so, individuals related to individuals who have caused the death of old female passengers of a car born in summer after the colliding of the car with another car, as likely drivers of the car, causing the colliding of the car with another car, having a certain genotype in their genome, could cause the death of old females born in summer passengers of a car after the colliding of the car with another car, as drivers of the car, causing the colliding of the car with another car. If so, it might be possible to prevent the death of old females born in summer passengers of a car after the colliding of the car with another car by preventing these old females from being the passengers of a car driven by such individuals having such a genotype in their genome.

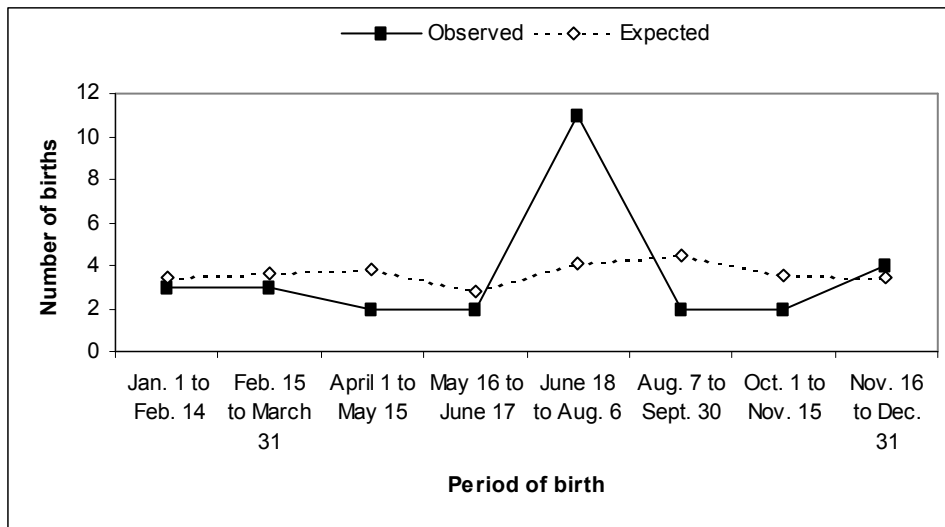
Figure 27. Observed and expected number of births according to seasonal periods of the year of old females of the population of the province of Québec deceased passengers of a car after a colliding with another car aged between 68 and 73 years old between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Passenger Car Truck Colliding

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering adolescent females who are dying passengers of a car after a colliding with a truck following a birth in different seasonal periods and the numerous adolescent females of the population of the province of Québec deceased passengers of a car after a colliding with a truck born in early summer (between June 18 and July 6, $\chi^2(1) = 11,67$ $p < 0,001$) presented on Figure 28 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering adolescent females dying passengers of a car after a colliding with a truck following a birth in early summer. If these numerous adolescent females born in early summer deceased passengers of a car after the colliding of the car with a truck behaved to decrease passengers of a car after a colliding of the car with a truck, it can be proposed that genotypes engendering adolescent females behaving to die passengers of a car after a colliding of the car with a truck following a birth in early summer in numerous individuals of the population of Québec explain the observation, if so, it can be predicted that adolescent females born in early summer related to the numerous adolescent females born in early summer deceased passengers of a car after the colliding of the car with a truck having in their genome a particular genotype will die passengers of a car behaving to die of this cause. If so, it might be possible to prevent the death of these adolescent females born in early summer having a certain genotype in their genome, as well as the death of other individuals in the car with them and in the truck implicated in the colliding by preventing these adolescent females from behaving to cause their death passengers of a car after a colliding of the car with a truck, by preventing them notably from moving the steering wheel of a car in which they are to cause a colliding with a truck, if they are displaying signs announcing that they might die of this cause in the future. Also, if genotypes engendering adolescent females dying passengers of a car after a colliding of the car with a truck behaving to cause their death of this cause following a birth in early summer in numerous individuals of the population of Québec explain the observation, individuals related to these numerous adolescent females born in early summer deceased passengers of a car after a colliding with a truck can be having in their reproductive cells the genotypes engendering adolescent female descendants born in early summer behaving to die passengers of a car after the colliding of the car with a truck and can avoid to conceive adolescent female descendants who will behave to die passengers of a car after a colliding with a truck, causing also likely the death of other individuals doing so, by avoiding to conceive with their reproductive cells containing the proposed genotypes daughters in early fall (between late September and early November) to avoid the birth of their daughters in early summer (between late June and early August). If these numerous adolescent females born in early summer deceased passengers of a car after a colliding with a truck have not behaved to cause their death from this cause, it can be proposed that genotypes engendering individuals causing the death of adolescent female passengers of a car born in early summer by causing the colliding of a car in which these adolescent females are with a truck, as likely drivers of the car, causing also likely their death doing so, in numerous individuals of the population of Québec explain the observation, if so, individuals related to individuals who have caused the death of adolescent female passengers of a car born in early summer after the colliding of the car with a truck, as likely drivers of the car, causing the colliding of the car with a truck, having a certain genotype in their genome, could cause the death of adolescent female passengers born in early summer of a car after the colliding of the car with a truck, as drivers of the car, causing the colliding of the car with a truck. If so, it might be possible to prevent the death of adolescent females born in early summer passengers of a car after a colliding of the car with a truck by preventing these adolescent females from being the passengers of a car driven by such individuals having such a genotype in their genome.

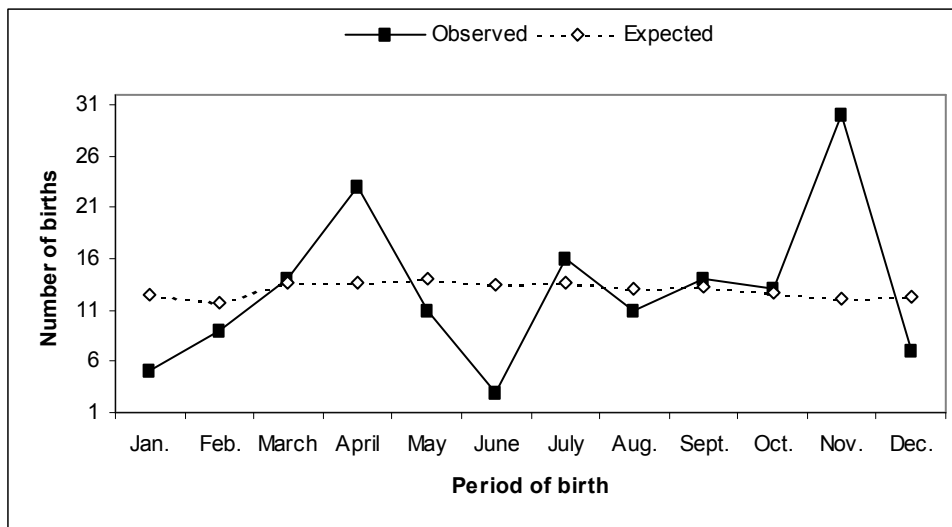
Figure 28. Observed and expected number of births according to seasonal periods of the year of adolescent females of the population of the province of Québec deceased passengers of a car after a colliding with a truck aged between 14 and 17 years old between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Passenger Car Solid Fixed Structure Colliding

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering young males who are dying passengers of a car after a colliding with a solid fixed structure following a birth in different seasonal periods and the numerous young males of the population of the province of Québec deceased passengers of a car after a colliding with a solid fixed structure born in fall (in November, $\chi^2(1) = 26,77$ $p < 0,001$) presented on Figure 29 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering young males dying passengers of a car after a colliding with a solid fixed structure following a birth in fall. If these numerous young males born in fall deceased passengers of a car after the colliding of the car with a solid fixed structure behaved to decrease passengers of a car after a colliding of the car with a solid fixed structure, it can be proposed that genotypes engendering young males behaving to die passengers of a car after a colliding of the car with a solid fixed structure following a birth in fall in numerous individuals of the population of Québec explain the observation, if so, it can be predicted that young males born in fall related to the numerous young males born in fall deceased passengers of a car after the colliding of a car with a solid fixed structure having in their genome a particular genotype will die passengers of a car behaving to die of this cause. If so, it might be possible to prevent the death of these young males born in fall having a certain genotype in their genome, as well as the death of other individuals in the car with them implicated in the colliding by preventing these young males from behaving to cause their death passengers of a car after a colliding of the car with a solid fixed structure, by preventing them notably from moving the steering wheel of a car in which they are passengers to cause a colliding with a solid fixed structure, if they are displaying signs announcing that they might die of this cause in the future. Also, if genotypes engendering young males dying passengers of a car after a colliding of the car with a solid fixed structure behaving to cause their death of this cause following a birth in fall in numerous individuals of the population of Québec explain the observation, individuals related to these numerous young males born in fall deceased passengers of a car after a colliding with a solid fixed structure can be having in their reproductive cells the genotypes engendering young male descendants born in fall behaving to die passengers of a car after the colliding of the car with a solid fixed structure and can avoid to conceive young male descendants who will die passengers of a car after a colliding with a solid fixed structure, causing also likely the death of other individuals doing so, by avoiding to conceive with their reproductive cells containing the proposed genotypes sons in winter (in February) to avoid the birth of their sons in fall (in November). If these numerous young males born in fall deceased passengers of a car after a colliding with a solid fixed structure have not behaved to cause their death from this cause, it can be proposed that genotypes engendering individuals causing the death of young male passengers of a car born in fall by causing the colliding of a car in which these young males are with a solid fixed structure, as likely drivers of the car, causing also likely their death doing so, in numerous individuals of the population of Québec explain the observation, if so, individuals related to individuals who have caused the death of young male passengers of a car born in fall after the colliding of the car with a solid fixed structure, as likely drivers of the car, causing the colliding of the car with a solid fixed structure, having a certain genotype in their genome, could cause the death of young male passengers born in fall of a car after the colliding of the car with a solid fixed structure, as drivers of the car, causing the colliding of the car with a solid fixed structure. If so, it might be possible to prevent the death of young males born in fall passengers of a car after a colliding of the car with a solid fixed structure by preventing these young males from being the passengers of a car driven by such individuals having such a genotype in their genome.

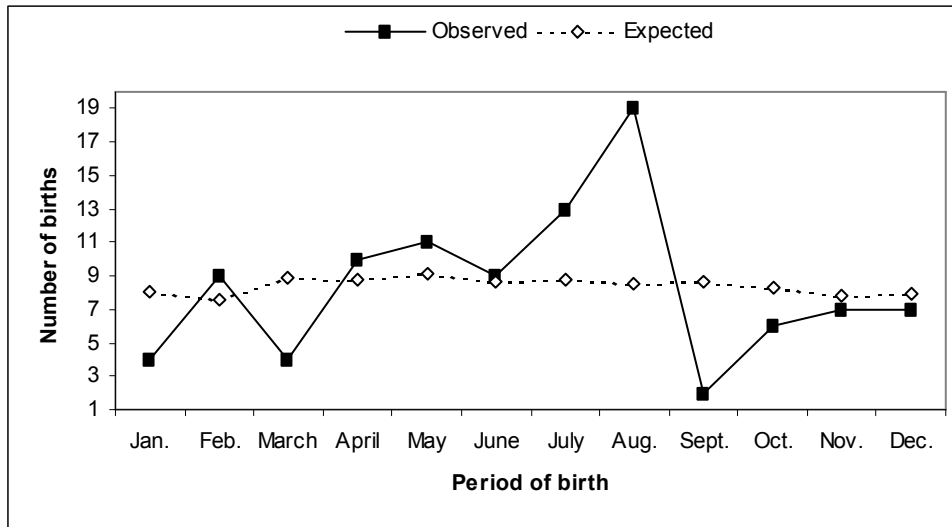
Figure 29. Observed and expected number of births according to seasonal periods of the year of young males of the population of the province of Québec deceased passengers of a car after a colliding with a solid fixed structure aged between 13 and 25 years old between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Passenger Car Overturn

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering females who are dying passengers of a car after an overturn following a birth in different seasonal periods and the numerous females of the population of the province of Québec deceased passengers of a car after an overturn born in summer (in August, $\chi^2 (1) = 13,03$ $p < 0,001$) presented on Figure 30 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering females dying passengers of a car after an overturn following a birth in summer. If these numerous females born in summer deceased passengers of a car after an overturn behaved to decrease passengers of a car in an overturn, it can be proposed that genotypes engendering females behaving to die passengers of a car in an overturn following a birth in summer in numerous individuals of the population of Québec explain the observation, if so, it can be predicted that females born in summer related to the numerous females born in summer deceased passengers of a car in an overturn having in their genome a particular genotype will die passengers of a car behaving to die of this cause. If so, it might be possible to prevent the death of these females born in summer having a certain genotype in their genome, as well as the death of other individuals in the car with them, by preventing these females from behaving to cause their death passengers of a car in an overturn, by preventing them notably from moving the steering wheel of a car in which they are to cause the overturn of the car, if they are displaying signs announcing that they might die of this cause in the future. Also, if genotypes engendering females dying passengers of a car in an overturn behaving to cause their death of this cause following a birth in summer in numerous individuals of the population of Québec explain the observation, individuals related to these numerous females born in summer deceased passengers of a car after an overturn can be having in their reproductive cells the genotypes engendering female descendants born in summer behaving to die passengers of a car in an overturn and can avoid to conceive female descendants who will die passengers of a car after an overturn by avoiding to conceive with their reproductive cells containing the proposed genotypes daughters in fall (in November) to avoid the birth of their daughters in summer (in August). If these numerous females born in summer deceased passengers of a car after an overturn have not behaved to cause their death from this cause, it can be proposed that genotypes engendering individuals causing the death of female passengers of a car born in summer by causing the overturn of a car in which these females are, as likely drivers of the car, causing also likely their death doing so, in numerous individuals of the population of Québec explain the observation, if so, individuals related to individuals who have caused the death of female passengers of a car born in summer in an overturn, as likely drivers of the car, causing the overturn of the car, having a certain genotype in their genome could cause the death of female passengers born in summer of a car in an overturn, as drivers of the car, causing the overturn. If so, it might be possible to prevent the death of females born in summer passengers of a car in an overturn by preventing these females from being the passengers of a car driven by such individuals having such a genotype in their genome.

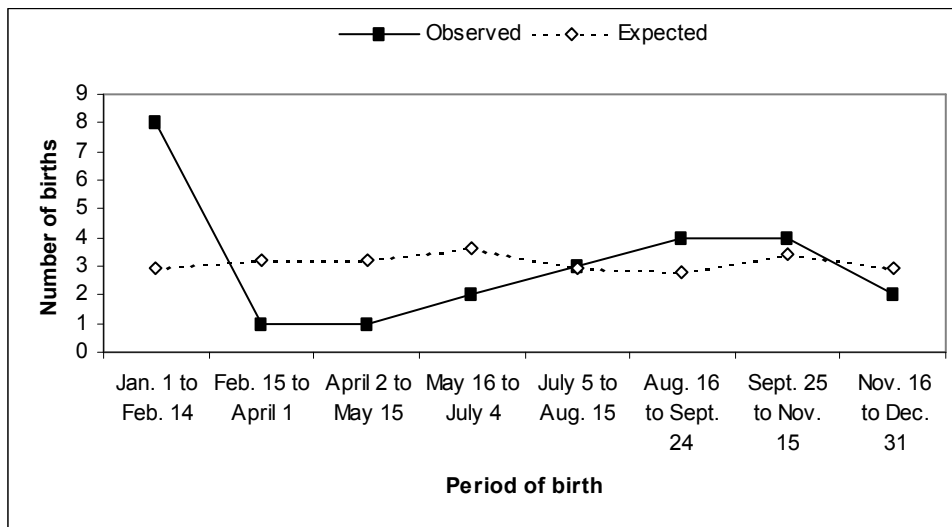
Figure 30. Observed and expected number of births according to seasonal periods of the year of females of the population of the province of Québec deceased passengers of a car after an overturn aged between 15 and 84 years old between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Shipwreck Drowning

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering males and females who are dying drowned in a shipwreck following a birth in different seasonal periods and the numerous males and females of the population of the province of Québec deceased drowned in a shipwreck born in winter (between January 1 and February 14, $\chi^2 (1) = 8,71$ $p < 0,01$) presented on Figure 31 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering males and females dying drowned in a shipwreck following a birth in winter. If these males and females born in winter have caused the shipwreck that caused their death by drowning, it is proposed that genotypes engendering males and females born in winter who are causing their death by drowning in a shipwreck found in numerous individuals of the population of Québec explain the observation, if so, it can be predicted that males and females born in winter related to the numerous males and females born in winter deceased drowned in a shipwreck having in their genome such a genotype will likely die drowned in a shipwreck that they will cause. According to the theory, it is possible to prevent the death of these males and females born in winter drowned in a shipwreck having in their genome a proposed genotype and likely the death of the eventual individuals on the boat with them by preventing these males and females from causing a shipwreck by driving a boat notably, if they are displaying signs of being likely to die of this cause in the future. Also, according to the theory, individuals related to these numerous males and females born in winter deceased drowned in a shipwreck can have in their reproductive cells the genotypes engendering male and female descendants born in winter dying drowned in a shipwreck and can avoid to conceive sons and daughters who will die from this cause by avoiding to conceive with their reproductive cells containing a proposed genotype sons and daughters in spring (between early April and mid-May) to avoid the birth of their sons and daughters in winter (between early January and mid-February).

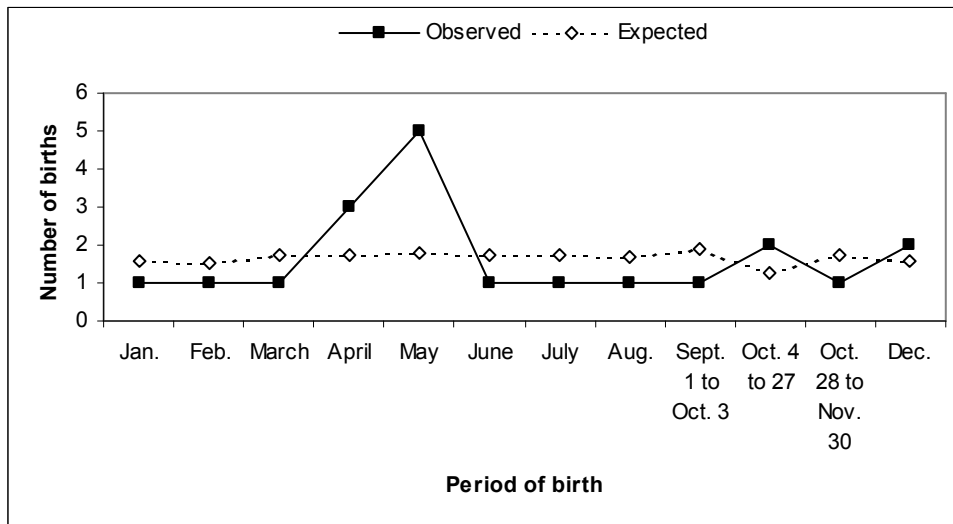
Figure 31. Observed and expected number of births according to seasonal periods of the year of males and females of the population of the province of Québec deceased drowned in a shipwreck between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Boat Boat Colliding

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering males and females who are dying of a trauma after the colliding of a boat on which they are with another boat following a birth in different seasonal periods and the numerous males and females of the population of the province of Québec deceased of a trauma after the colliding of a boat on which they were with another boat born in spring (in May, $\chi^2 (1) = 5,72$ $p < 0,05$) presented on Figure 32 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering males and females dying of a trauma after the colliding of a boat on which they are with another boat following a birth in spring. If these males and females born in spring have caused the colliding between a boat in which they were with another boat that caused their death from trauma, it is proposed that genotypes engendering males and females born in spring who are causing their death from a trauma by causing a colliding between a boat in which they are with another boat found in numerous individuals of the population of Québec explain the observation, if so, it can be predicted that males and females born in spring related to the numerous males and females born in spring deceased of a trauma after the colliding of a boat in which they were with another boat having in their genome such a genotype will likely die of a trauma after the colliding of a boat in which they are with another boat. According to the theory, it is possible to prevent the death of these males and females born in spring of a trauma after the colliding of a boat in which they could be with another boat having in their genome a proposed genotype and likely the death of the eventual individuals in a boat with them and in another boat implicated in the colliding by preventing these males and females from driving a boat and causing a colliding of the driven boat with another boat notably, if they are displaying signs of being likely to die of this cause in the future. Also, according to the theory, individuals related to these numerous males and females born in spring deceased of a trauma after the colliding of a boat in which they were with another boat can have in their reproductive cells the genotypes engendering male and female descendants born in spring dying of a trauma after the colliding of a boat in which they are with another boat and can avoid to conceive sons and daughters who will die from this cause by avoiding to conceive with their reproductive cells containing a proposed genotype sons and daughters in summer (in August) to avoid the birth of their sons and daughters in spring (in May).

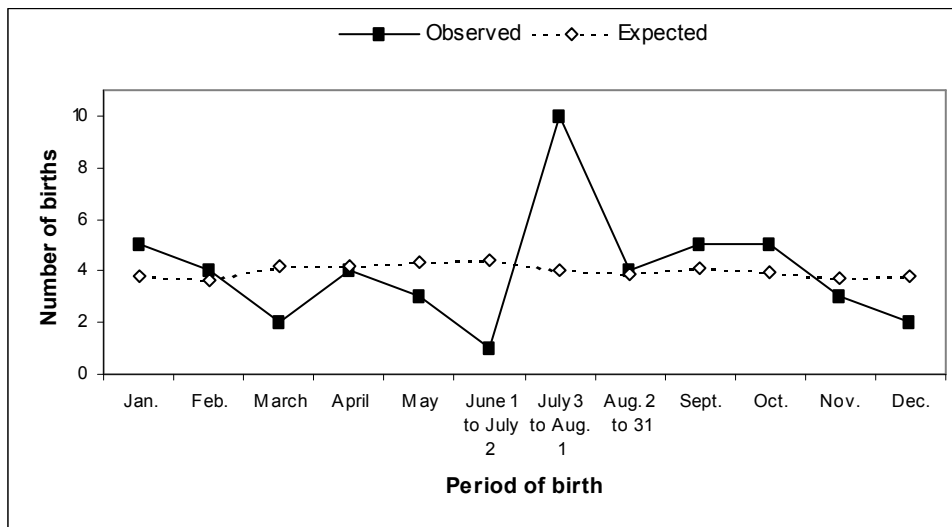
Figure 32. Observed and expected number of births according to seasonal periods of the year of males and females of the population of the province of Québec deceased of a trauma after the colliding of a boat in which they were with another boat aged between 16 and 44 years old between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Drowning from a boat

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering young males who are dying drowned from a boat without a collision as a cause following a birth in different seasonal periods and the numerous young males of the population of the province of Québec deceased drowned from a boat without a collision as a cause born in summer (between July 3 and August 1, $\chi^2(1) = 8,79$ $p < 0,01$) presented on Figure 33 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering young males dying drowned from a boat without a collision as a cause following a birth in summer. If these numerous young males born in summer have caused their drowning from a boat, it is proposed that genotypes engendering young males causing their death by drowning from a boat following a birth in summer in numerous individuals of the population of Québec are causing the observation, if so, it can be predicted that young males born in summer related to the numerous young males born in summer deceased drowned from a boat having in their genome such a genotype will likely die drowned from a boat, causing their drowning from the boat without a collision as a cause of the drowning. If so, it might be possible to prevent the death of these young males born in summer drowned from a boat having in their genome a proposed genotype and likely the death of the eventual individuals in the boat with them by preventing these young males from riding a boat, if they are displaying signs of being likely to die from this cause in the future. Also, if the genotypes proposed are in numerous individuals of the population of Québec, causing the observation, individuals related to these numerous young males born in summer deceased drowned from a boat can have in their reproductive cells the genotypes engendering young male descendants born in summer dying drowned from a boat and can avoid to conceive sons who will die from this cause by avoiding to conceive with their reproductive cells containing a proposed genotype sons in fall (between early October and early November) to avoid the birth of their sons in summer (between early July and early August).

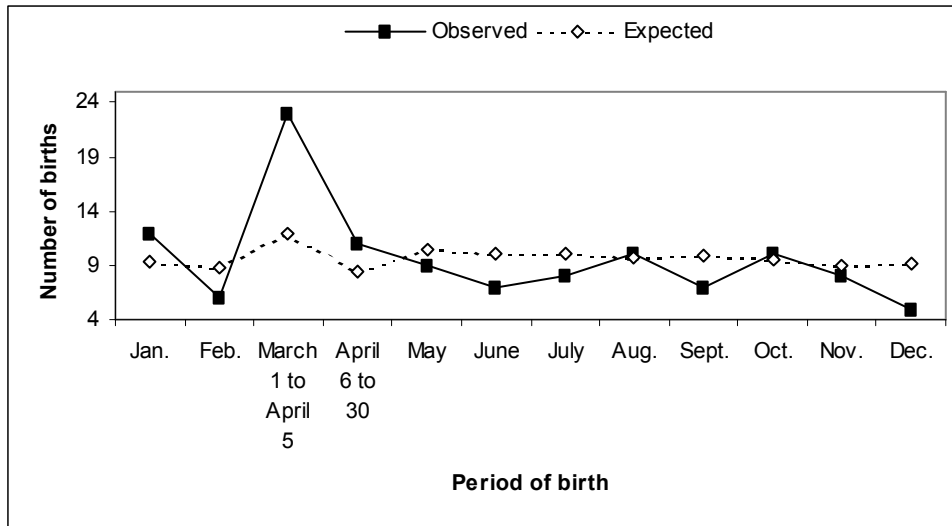
Figure 33. Observed and expected number of births according to seasonal periods of the year of young males of the population of the province of Québec deceased of drowning from a boat without collision aged between 15 and 22 years old between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Snowmobile Accident

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering males who are dying driving a snowmobile following a birth in different seasonal periods and the numerous males of the population of the province of Québec deceased driving a snowmobile born in late winter and early spring (between March 1 and April 5, $\chi^2(1) = 10,52$ $p < 0,01$) presented on Figure 34 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering males dying driving a snowmobile following a birth in late winter and early spring. According to the theory, it can be predicted that males born in late winter and early spring related to the numerous males born in late winter and early spring deceased driving a snowmobile having in their genome such a genotype will likely die driving a snowmobile. According to the theory, it is possible to prevent the death of these males born in late winter and early spring driving a snowmobile having in their genome a proposed genotype and likely the death of the eventual individuals on the snowmobile with them by preventing these males from driving a snowmobile, if they are displaying signs of being likely to die of this cause in the future. Also, according to the theory, individuals related to these numerous males born in late winter and early spring deceased driving a snowmobile can have in their reproductive cells the genotypes engendering male descendants born in late winter and early spring dying driving a snowmobile and can avoid to conceive sons who will die from this cause and likely cause the death of other individuals by avoiding to conceive with their reproductive cells containing a proposed genotype sons in late spring and early summer (between early June and early July) to avoid the birth of their sons in late winter and early spring (between early March and early April).

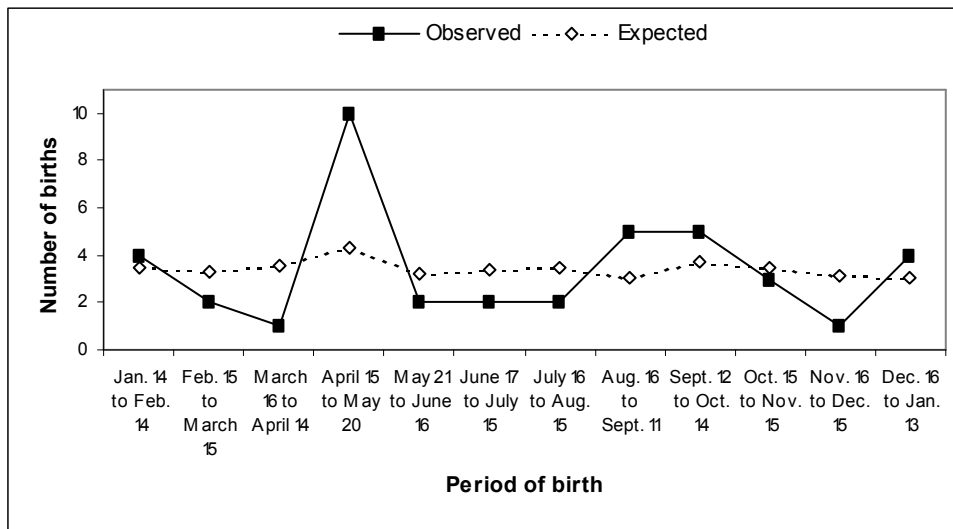
Figure 34. Observed and expected number of births according to seasonal periods of the year of males of the population of the province of Québec deceased driving a snowmobile between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Snowmobile Drowning Hypothermia

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering males who are dying driving a snowmobile of drowning or of hypothermia following a birth in different seasonal periods and the numerous males of the population of the province of Québec deceased driving a snowmobile of drowning or of hypothermia born in spring (between April 15 and May 20, $\chi^2(1) = 7,64$ $p < 0,01$) presented on Figure 35 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering males dying driving a snowmobile of drowning or of hypothermia following a birth in spring. According to the theory, it can be predicted that males born in spring related to the numerous males born in spring deceased driving a snowmobile of drowning or of hypothermia having in their genome such a genotype will likely die driving a snowmobile of drowning or of hypothermia. According to the theory, it is possible to prevent the death of these males born in spring driving a snowmobile of drowning or of hypothermia having in their genome a proposed genotype and likely the death of the eventual individuals on the snowmobile with them by preventing these males from driving a snowmobile, if they are displaying signs of being likely to die of this cause in the future. Also, according to the theory, individuals related to these numerous males born in spring deceased driving a snowmobile of drowning or of hypothermia can have in their reproductive cells the genotypes engendering male descendants born in spring dying driving a snowmobile of drowning or of hypothermia and can avoid to conceive sons who will die from this cause and likely cause the death of other individuals by avoiding to conceive with their reproductive cells containing a proposed genotype sons in summer (between mid-July and late August) to avoid the birth of their sons in spring (between mid-April and late May).

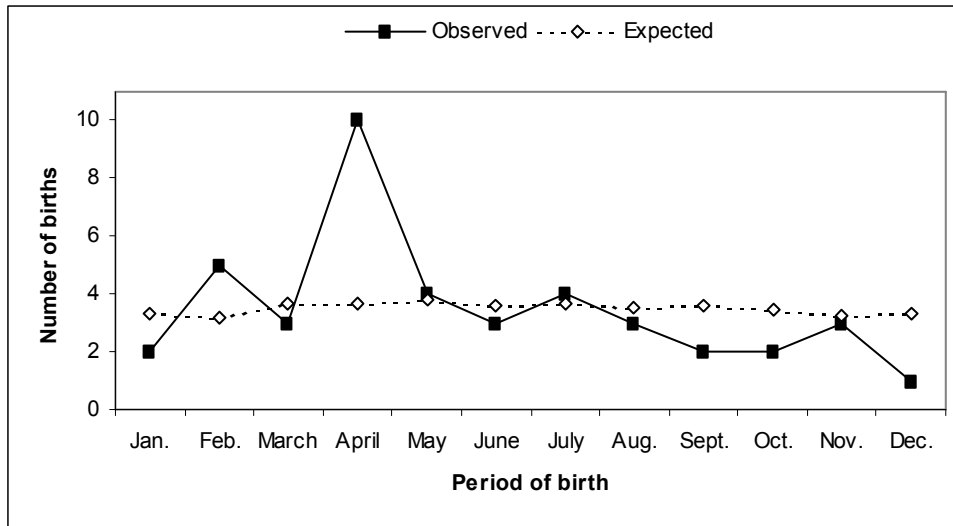
Figure 35. Observed and expected number of births according to seasonal periods of the year of males of the population of the province of Québec deceased driving a snowmobile of drowning or of hypothermia aged between 20 and 65 years old between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Four-Wheel Vehicle Accident

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering males who are dying driving a four-wheel vehicle following a birth in different seasonal periods and the numerous males of the population of the province of Québec deceased driving a four-wheel vehicle born in spring (in April, $\chi^2(1) = 10,94$ $p < 0,001$) presented on Figure 36 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering males dying driving a four-wheel vehicle following a birth in spring. According to the theory, it can be predicted that males born in spring related to the numerous males born in spring deceased driving a four-wheel vehicle having in their genome such a genotype will likely die driving a four-wheel vehicle. According to the theory, it is possible to prevent the death of these males born in spring driving a four-wheel vehicle having in their genome a proposed genotype and likely the death of the eventual individuals on the four-wheel vehicle with them by preventing these males from driving a four-wheel vehicle, if they are displaying signs of being likely to die of this cause in the future. Also, according to the theory, individuals related to these numerous males born in spring deceased driving a four-wheel vehicle can have in their reproductive cells the genotypes engendering male descendants born in spring dying driving a four-wheel vehicle and can avoid to conceive sons who will die from this cause and likely cause the death of other individuals by avoiding to conceive with their reproductive cells containing a proposed genotype sons in summer (in July) to avoid the birth of their sons in spring (in April).

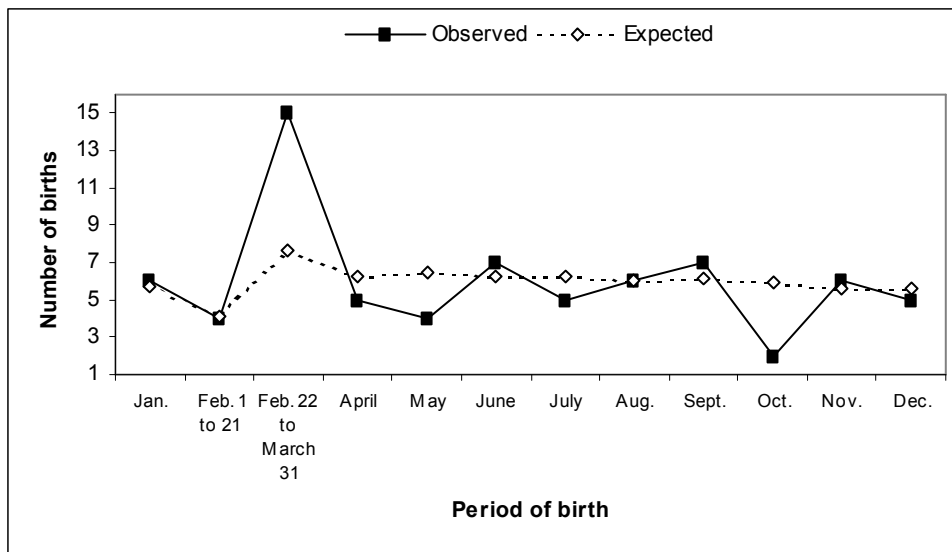
Figure 36. Observed and expected number of births according to seasonal periods of the year of males of the population of the province of Québec deceased driving a four-wheel vehicle aged between 34 and 70 years old between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Plane Crash

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering males who are dying as a pilot of a plane after a crash of the plane following a birth in different seasonal periods and the numerous males of the population of the province of Québec deceased as a pilot of a plane after a crash of the plane born in late winter and early spring (between February 22 and March 31, $\chi^2 (1) = 7,03 p < 0,01$) presented on Figure 37 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering males dying as a pilot of a plane after a crash of the plane following a birth in late winter and early spring. According to the theory, it can be predicted that males born in late winter and early spring related to the numerous males born in late winter and early spring deceased as a pilot of a plane after a crash of the plane having in their genome such a genotype will likely die as a pilot of a plane after a crash of the plane if a pilot of a plane. According to the theory, it is possible to prevent the death of these males born in late winter and early spring as a pilot of a plane after a crash of the plane having in their genome a proposed genotype and likely the death of the eventual individuals in the plane with the pilot by preventing these males from being a pilot of a plane if they are displaying signs of being likely to die of the cause in the future. Also, according to the theory, individuals related to these numerous males born in late winter and early spring deceased as a pilot of a plane after a crash of the plane can have in their reproductive cells the genotypes engendering male descendants born in late winter and early spring dying as a pilot of a plane after a crash of the plane and can avoid to conceive sons who will die from this cause and likely cause the death of other individuals by avoiding to conceive with their reproductive cells containing the proposed genotypes sons in late spring and early summer (between late May and early July) to avoid the birth of their sons in late winter and early spring (between late February and late March).

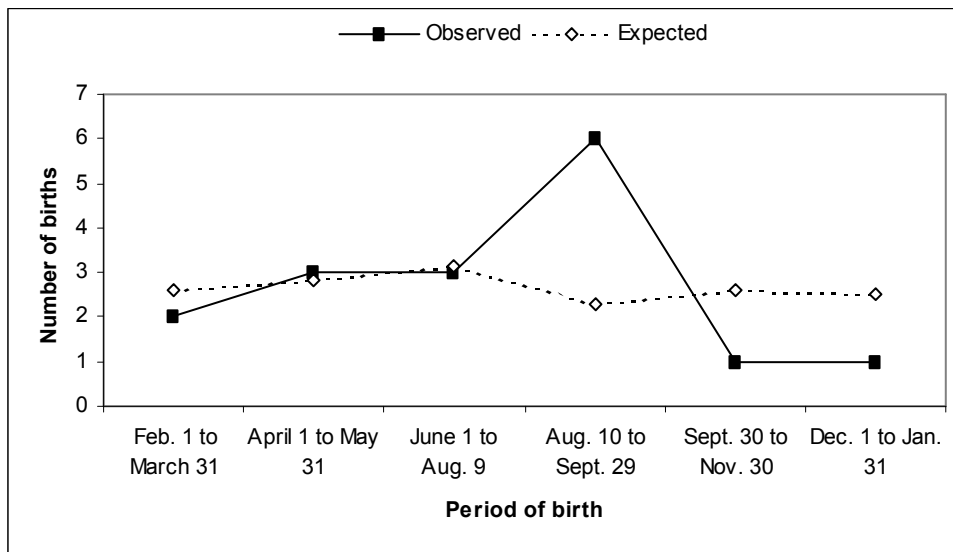
Figure 37. Observed and expected number of births according to seasonal periods of the year of males of the population of the province of Québec deceased as a pilot of a plane after a crash of the plane aged between 21 and 64 years old between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Plane Crash

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering males who are dying as a pilot of a plane at the take-off or at the landing of the plane following a birth in different seasonal periods and the numerous males of the population of the province of Québec deceased as a pilot of a plane at the take-off or at the landing of the plane born in late summer and early fall (between August 10 and September 29, $\chi^2(1) = 6,07$ $p < 0,05$) presented on Figure 38 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering males dying as a pilot of a plane at the take-off or at the landing of the plane following a birth in late summer and early fall. According to the theory, it can be predicted that males born in late summer and early fall related to the numerous males born in late summer and early fall deceased as a pilot of a plane at the take-off or at the landing of the plane having in their genome such a genotype will likely die as a pilot of a plane at the take-off or at the landing of the plane, if a pilot of a plane. According to the theory, it is possible to prevent the death of these males born in late summer and early fall as a pilot of a plane at the take-off or at the landing of the plane having in their genome a proposed genotype and likely the death of the eventual individuals in the plane with the pilot by preventing these males from being a pilot of a plane if they are displaying signs of being likely to die of the cause in the future. Also, according to the theory, individuals related to these numerous males born in late summer and early fall deceased as a pilot of a plane at the take-off or at the landing of the plane can have in their reproductive cells the genotypes engendering male descendants born in late summer and early fall dying as a pilot of a plane at the take-off or at the landing of the plane and can avoid to conceive sons who will die from this cause by avoiding to conceive with their reproductive cells containing a proposed genotype sons in late fall and early winter (between early November and late December) to avoid the birth of their sons in late summer and early fall (between early August and late September).

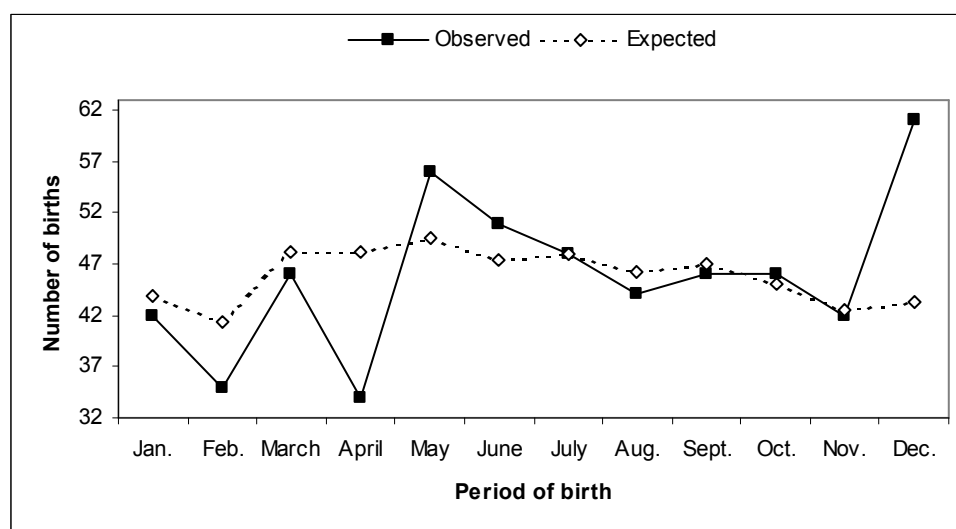
Figure 38. Observed and expected number of births according to seasonal periods of the year of males of the population of the province of Québec deceased as a pilot of a plane at the take-off or at the landing of the plane aged between 43 and 70 years old between 1987 and 1999 (Source: Bureau du Coroner du Québec).



House Burning

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering males and females who are dying of asphyxia in the burning of a private house following a birth in different seasonal periods and the numerous males and females of the population of the province of Québec deceased of asphyxia in the burning of a private house born in late fall and early winter (in December, $\chi^2(1) = 7,23$ $p < 0,01$) presented on Figure 39 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering males and females dying of asphyxia in the burning of a private house following a birth in late fall and early winter. If these numerous males and females born in late fall and early winter deceased of asphyxia in the burning of a private house are related and have caused the burning of the private house that caused their death by asphyxia, it can be postulated that genotypes engendering males and females born in late fall and early winter who are causing their death by asphyxia by causing the burning of the private house in which they are found in numerous individuals of the population of Québec are causing the observation, if so, it can be predicted that males and females born in late fall and early winter related to the numerous males and females born in late fall and early winter deceased of asphyxia in the burning of a private house having in their genome such a genotype will likely die of asphyxia in the burning of a private house after having caused the burning of the private house. If so, it might be possible to prevent the death of these males and females and of the eventual individuals in the private house with them by preventing these males and females from causing the burning of the private house. Also, if the proposed genotypes are in numerous individuals of the population of Québec, causing the observation, individuals related to these numerous males and females born in late fall and early winter deceased of asphyxia in the burning of a private house can have in their reproductive cells the genotypes engendering male and female descendants born in late fall and early winter dying of asphyxia in the burning of a private house by causing the burning of the private house and can avoid to conceive sons and daughters who will die from this cause and likely cause the death of other individuals in the burning of the private house by avoiding to conceive with their reproductive cells containing a proposed genotype sons and daughters in late winter and early spring (in March) to avoid the birth of their sons and daughters in late fall and early winter (in December). If these numerous males and females born in late fall and early winter deceased of asphyxia in the burning of a private house are not related and have not caused the burning of the private house, it is proposed that genotypes engendering individuals who are causing the death of males and females born in late fall and early winter by causing the burning of the private house in which such males and females are found in numerous individuals of the population of Québec explain the observation. If so, it can be predicted that individuals who have caused the death of these males and females born in late fall and early winter by causing the burning of the private house in which such males and females were are related, having in their genome a genotype engendering individuals causing the death of males and females born in late fall and early winter by causing the burning of the private house in which such males and females are inherited from common genitors and that they are likely, as well as other individuals related to these individuals, to cause the death of males and females born in late fall and early winter by causing the burning of the private house in which such males and females are. If so, the prevention of the death of males and females born in late fall and early winter and of eventual other individuals in the private house with them could be possible by preventing these individuals having such a proposed genotype in their genome from causing the burning of the private house in which are males and females born in late fall and early winter.

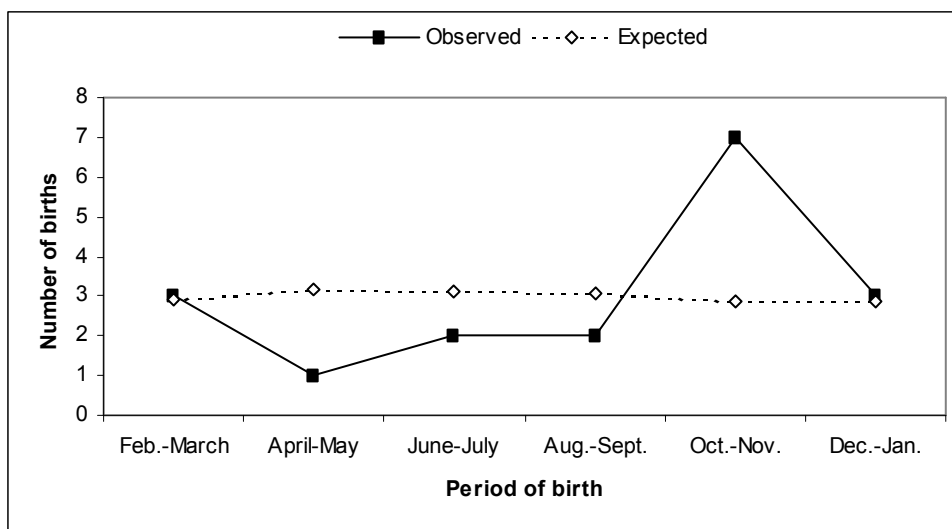
Figure 39. Observed and expected number of births according to seasonal periods of the year of males and females of the population of the province of Québec deceased of asphyxia in the burning of a private house between 1987 and 1999 (Source: Bureau du Coroner du Québec).



House Burning

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering females who are dying of burns in the burning of a private house following a birth in different seasonal periods and the numerous females of the population of the province of Québec deceased of burns in the burning of a private house born in fall (in October and November, $\chi^2(1) = 5,97$ $p < 0,05$) presented on Figure 40 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering females dying of burns in the burning of a private house following a birth in fall. If these numerous females born in fall deceased of burns in the burning of a private house are related and have caused the burning of the private house that caused their death from burns, it can be postulated that genotypes engendering females born in fall who are causing their death from burns by causing the burning of the private house in which they are found in numerous individuals of the population of Québec are causing the observation, if so, it can be predicted that females born in fall related to the numerous females born in fall deceased of burns in the burning of a private house having in their genome such a genotype will likely die of burns in the burning of a private house after having caused the burning of the private house. If so, it might be possible to prevent the death of these females and of the eventual individuals in the private house with them by preventing these females from causing the burning of the private house. Also, if the proposed genotypes are in numerous individuals of the population of Québec, causing the observation, individuals related to these numerous females born in fall deceased of burns in the burning of a private house can have in their reproductive cells the genotypes engendering female descendants born in fall dying of burns in the burning of a private house causing the burning of the private house and can avoid to conceive daughters who will die from this cause and likely cause the death of eventual other individuals in the burning of the private house with them by avoiding to conceive with their reproductive cells containing a proposed genotype daughters in winter (in January and February) to avoid the birth of their daughters in fall (in October and November). If these numerous females born in fall deceased of burns in the burning of a private house are not related and have not caused the burning of the private house, it is proposed that genotypes engendering individuals who are causing the death of females born in fall by causing the burning of the private house in which such females are found in numerous individuals of the population of Québec explain the observation. If so, it can be predicted that individuals who have caused the death of these females born in fall by causing the burning of the private house in which such females were related, having in their genome a genotype engendering individuals causing the death of females born in fall by causing the burning of the private house in which such females are inherited from common genitors and that they are likely, as well as other individuals related to these individuals, to cause the death of females born in fall by causing the burning of the private house in which such females are. If so, the prevention of the death of females born in fall and of eventual other individuals with them in a burning private house could be possible by preventing these individuals having such a proposed genotype in their genome from causing the burning of the private house in which are females born in fall.

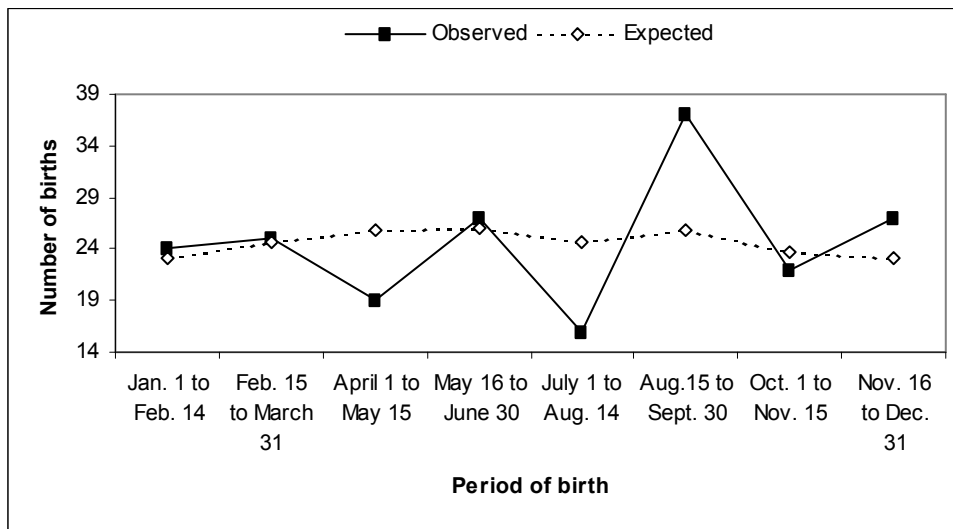
Figure 40. Observed and expected number of births according to seasonal periods of the year of females of the population of the province of Québec deceased of burns in the burning of a private house between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Building Burning

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering males who are dying of asphyxia in the burning of a building following a birth in different seasonal periods and the numerous males of the population of the province of Québec deceased of asphyxia in the burning of a building born in late summer and early fall (August 15 and September 30, $\chi^2(1) = 4,76$ $p < 0,001$) presented on Figure 41 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering males dying of asphyxia in the burning of a building following a birth in late summer and early fall. If these numerous males born in late summer and early fall deceased of asphyxia in the burning of a building are related and have caused the burning of the building that caused their death by asphyxia, it can be postulated that genotypes engendering males born in late summer and early fall who are causing their death by asphyxia by causing the burning of the building in which they are found in numerous individuals of the population of Québec are causing the observation, if so, it can be predicted that males born in late summer and early fall related to the numerous males born in late summer and early fall deceased of asphyxia in the burning of a building having in their genome such a genotype will likely die of asphyxia in the burning of a building after having caused the burning of the building. If so, it might be possible to prevent the death of these males and of the eventual individuals in the building with them by preventing these males from causing the burning of the building. Also, if the proposed genotypes are in numerous individuals of the population of Québec, causing the observation, individuals related to these numerous males born in late summer and early fall deceased of asphyxia in the burning of a building can have in their reproductive cells the genotypes engendering male descendants born in late summer and early fall dying of asphyxia in the burning of a building causing the burning of the building and can avoid to conceive sons who will die from this cause and likely cause the death of other individuals in the burning of the building by avoiding to conceive with their reproductive cells containing a proposed genotype sons in late fall and early winter (between mid-November and late December) to avoid the birth of their sons in late summer and early fall (between mid-August and late September). If these numerous males born in late summer and early fall deceased of asphyxia in the burning of a building are not related and have not caused the burning of the building, it is proposed that genotypes engendering individuals who are causing the death of males born in late summer and early fall by causing the burning of the building in which such males are found in numerous individuals of the population of Québec explain the observation. If so, it can be predicted that individuals who have caused the death of these males born in late summer and early fall by causing the burning of the building in which such males were are related, having in their genome a genotype engendering individuals causing the death of males born in late summer and early fall by causing the burning of the building in which they are inherited from common genitors and that they are likely, as well as other individuals related to these individuals, to cause the death of males born in late summer and early fall by causing the burning of the building in which such males are. If so, the prevention of the death of males born in late summer and early fall and of other individuals in the building could be possible by preventing these individuals having such a proposed genotype in their genome from causing the burning of the building in which are males born in late summer and early fall.

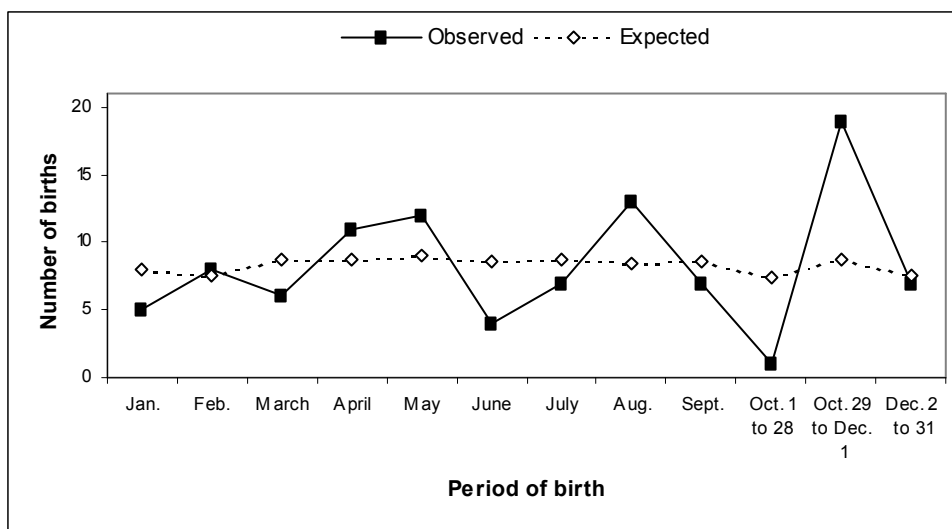
Figure 41. Observed and expected number of births according to seasonal periods of the year of males of the population of the province of Québec deceased of asphyxia in the burning of a building between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Building Burning

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering females who are dying of asphyxia in the burning of a building following a birth in different seasonal periods and the numerous females of the population of the province of Québec deceased of asphyxia in the burning of a building born in fall (between October 29 and December 1, $\chi^2 (1) = 11,93$ $p < 0,001$) presented on Figure 42 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering females dying of asphyxia in the burning of a building following a birth in fall. If these numerous females born in fall deceased of asphyxia in the burning of a building are related and have caused the burning of the building that caused their death by asphyxia, it can be postulated that genotypes engendering females born in fall who are causing their death by asphyxia by causing the burning of the building in which they are found in numerous individuals of the population of Québec are causing the observation, if so, it can be predicted that females born in fall related to the numerous females born in fall deceased of asphyxia in the burning of a building having in their genome such a genotype will likely die of asphyxia in the burning of a building after having caused the burning of the building. If so, it might be possible to prevent the death of these females and of the eventual individuals in the building with them by preventing these females from causing the burning of the building. Also, if the proposed genotypes are in numerous individuals of the population of Québec, causing the observation, individuals related to these numerous females born in fall deceased of asphyxia in the burning of a building can have in their reproductive cells the genotypes engendering female descendants born in fall dying of asphyxia in the burning of a building causing the burning of the building and can avoid to conceive daughters who will die from this cause and likely cause the death of other individuals in the burning of the building by avoiding to conceive with their reproductive cells containing a proposed genotype daughters in winter (between late January and early March) to avoid the birth of their daughters in fall (between late October and early December). If these numerous females born in fall deceased of asphyxia in the burning of a building are not related and have not caused the burning of the building, it is proposed that genotypes engendering individuals who are causing the death of females born in fall by causing the burning of the building in which such females are found in numerous individuals of the population of Québec explain the observation. If so, it can be predicted that individuals who have caused the death of these females born in fall by causing the burning of the building in which such females were are related, having in their genome a genotype engendering individuals causing the death of females born in fall by causing the burning of the building in which they are inherited from common genitors and that they are likely, as well as other individuals related to these individuals, to cause the death of females born in fall by causing the burning of the building in which such females are. If so, the prevention of the death of females born in fall and of other individuals in the building could be possible by preventing these individuals having such a proposed genotype in their genome from causing the burning of the building in which are females born in fall.

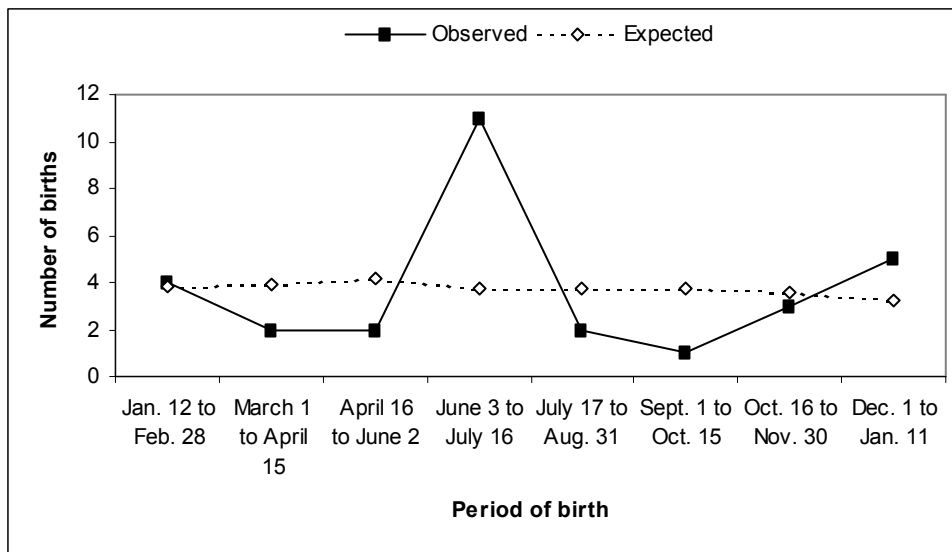
Figure 42. Observed and expected number of births according to seasonal periods of the year of females of the population of the province of Québec deceased of asphyxia in the burning of a building aged between 20 and 83 years old between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Explosion

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering males who are dying in an explosion caused by a gas following a birth in different seasonal periods and the numerous males of the population of the province of Québec deceased in an explosion caused by a gas born in late spring and early summer (between June 3 and July 16, $\chi^2(1) = 13,94$ $p < 0,001$) presented on Figure 43 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering males dying in an explosion caused by a gas following a birth in late spring and early summer. If these numerous males born in late spring and early summer have caused the explosion caused by a gas that caused their death, according to the theory, it can be predicted that males born in late spring and early summer related to the numerous males born in late spring and early summer deceased in an explosion caused by a gas having in their genome such a postulated genotype engendering males born in late spring and early summer who are causing their death by causing an explosion caused by a gas will likely die in an explosion caused by a gas, explosion that they will cause. It might be possible to prevent the death of these males born in late spring and early summer having a certain genotype in their genome in an explosion caused by a gas and of other individuals who can be killed by the explosion caused by a gas by preventing these males from causing such an explosion. Also, according to the theory, individuals related to these numerous males born in late spring and early summer deceased in an explosion caused by a gas can have in their reproductive cells the genotypes engendering male descendants born in late spring and early summer dying in an explosion caused by a gas, explosion that they can cause, and can avoid to conceive sons who will die from this cause and who will likely cause the death of other individuals doing so, by avoiding to conceive with their reproductive cells containing a proposed genotype sons in late summer and early fall (between early September and mid-October) to avoid the birth of their sons in late spring and early summer (between early June and mid-July).

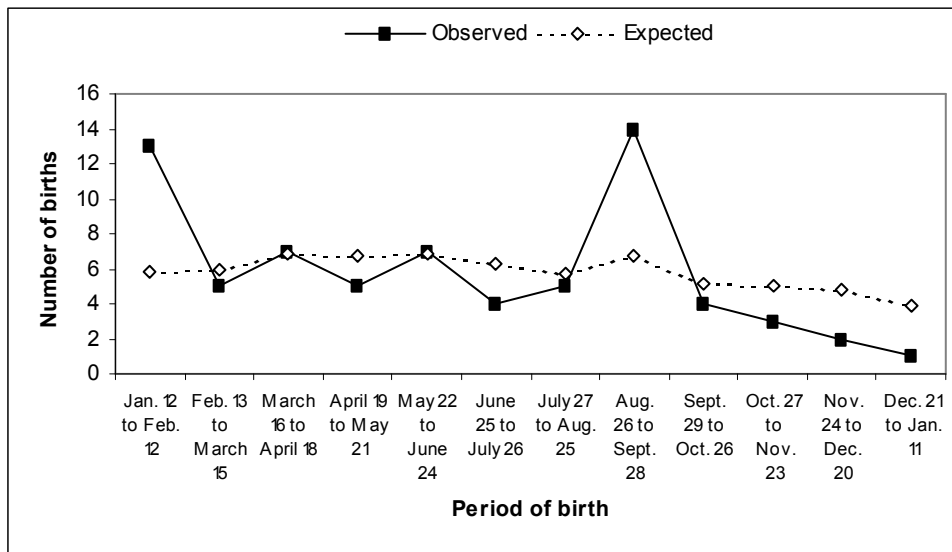
Figure 43. Observed and expected number of births according to seasonal periods of the year of males of the population of the province of Québec deceased in an explosion caused by a gas between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Infanticide

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering male and female infants who are dying assassinated following a birth in different seasonal periods and the numerous male and female infants of the population of the province of Québec deceased assassinated born in winter (between January 12 and February 12, $\chi^2(1) = 8,70$ $p < 0,01$) and born in late summer and early fall (between August 26 and September 28, $\chi^2(1) = 7,89$ $p < 0,01$) presented on Figure 44 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering male and female infants dying assassinated following a birth in winter and following a birth in late summer and early fall. Considering that these numerous male and female infants born in winter and born in late summer and early fall assassinated have been killed mainly by parents, it is proposed that genotypes engendering parents who are slaying male and female infants born in winter and born in late summer and early fall found in numerous individuals of the population of Québec explain the observation. According to the theory, it can be predicted that male and female infants born in winter and born in late summer and early fall of parents related to the parents who have killed their male and female infants born in winter and born in late summer and early fall, parents having in their genome a proposed genotype engendering parents who are slaying their male and female infants born in winter and born in late summer and early fall, are likely to be killed by their parents. According to the theory, it is possible to prevent the death of these male and female infants born in winter and born in late summer and early fall by removing them from the environment of parents who are having in their genome a proposed genotype engendering parents who are slaying male and female infants born in winter and born in late summer and early fall.

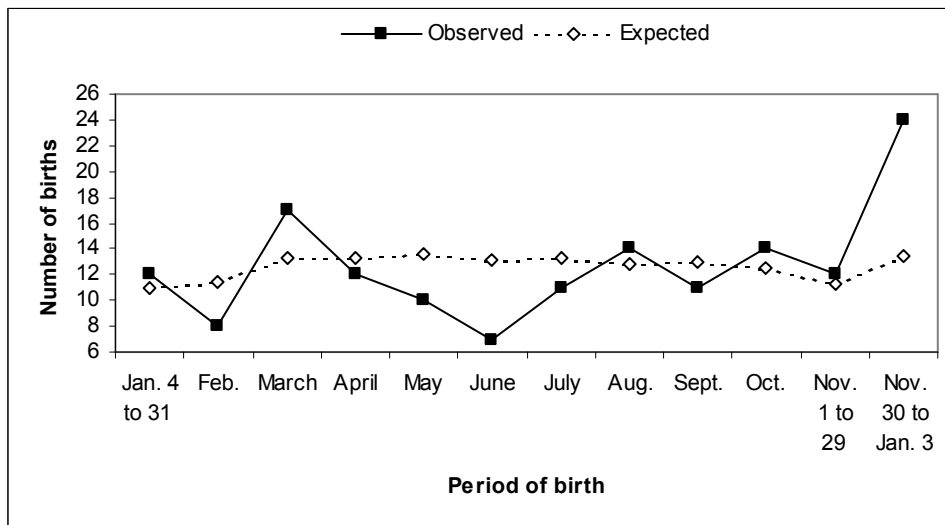
Figure 44. Observed and expected number of births according to seasonal periods of the year of male and female infants deceased assassinated aged below 3 years old, mainly by parents, of the population of the province of Québec between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Female Homicide

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering young females who are dying assassinated following a birth in different seasonal periods and the numerous young females of the population of the province of Québec deceased assassinated born in late fall and early winter (between November 30 and January 3, $\chi^2(1) = 8,15$ $p < 0,001$) presented on Figure 45 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering young females dying assassinated following a birth in late fall and early winter. If these numerous young females born in late fall and early winter deceased assassinated are related, it can be postulated that genotypes engendering young females born in late fall and early winter who are causing their death by getting in relationships with individuals who will kill them in numerous individuals of the population of Québec are causing the observation, if so, it can be predicted that young females born in late fall and early winter related to the numerous young females born in late fall and early winter deceased assassinated having in their genome such a genotype will likely die assassinated after having entered in relationships with individuals who will kill them. If so, it might be possible to prevent the death of these young females born in late fall and early winter by preventing these young females from entering in relationships with individuals who will kill them. Also, if the proposed genotypes are in numerous individuals of the population of Québec, causing the observation, individuals related to these numerous young females born in late fall and early winter deceased assassinated can have in their reproductive cells the genotypes engendering female descendants born in late fall and early winter dying assassinated and can avoid to conceive daughters who will die from this cause by entering in relationships with individuals who will kill them by avoiding to conceive with their reproductive cells containing a proposed genotype daughters in late winter and early spring (between early March and early April) to avoid the birth of their daughters in late fall and early winter (between late November and early January). If these numerous young females born in late fall and early winter deceased assassinated are not related and have not caused their assassination by having entered in relationships with individuals who have killed them, it is proposed that genotypes engendering individuals who are causing the death of young females born in late fall and early winter by killing them found in numerous individuals of the population of Québec explain the observation. If so, it can be predicted that individuals who have caused the death of these young females born in late fall and early winter by killing them are related, having in their genome a genotype engendering individuals causing the death of young females born in late fall and early winter by killing them inherited from common genitors and that they are likely, as well as other individuals related to these individuals, to cause the death of young females born in late fall and early winter by killing them. If so, the prevention of the death of young females born in late fall and early winter could be possible by preventing these individuals having such a proposed genotype in their genome from killing young females born in late fall and early winter.

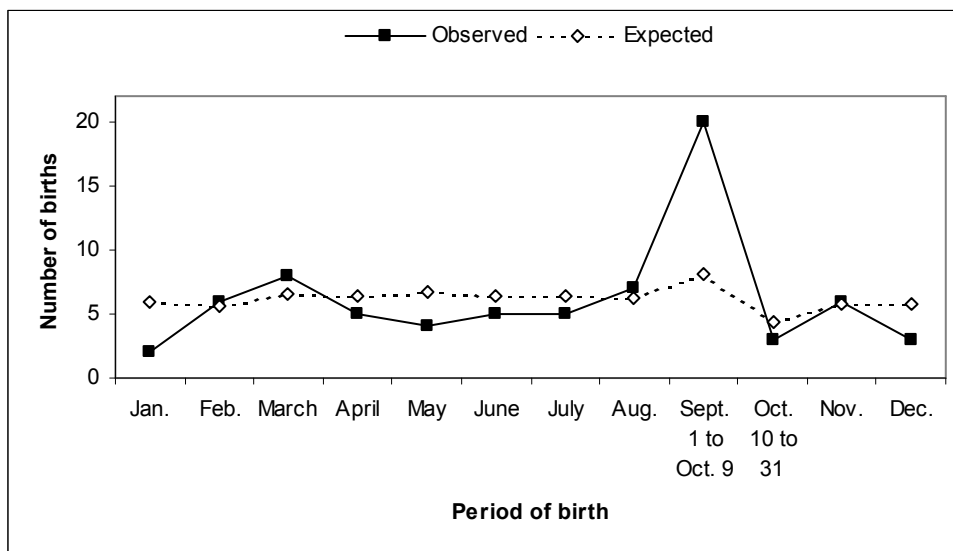
Figure 45. Observed and expected number of births according to seasonal periods of the year of young females of the population of the province of Québec deceased assassinated aged between 15 and 27 years old between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Old Male Homicide

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering old males who are dying assassinated following a birth in different seasonal periods and the numerous old males of the population of the province of Québec deceased assassinated born in late summer and early fall (between September 1 and October 9, $\chi^2(1) = 17,58 p < 0,001$) presented on Figure 46 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering old males dying assassinated following a birth in late summer and early fall. If these numerous old males born in late summer and early fall deceased assassinated are related, it can be postulated that genotypes engendering old males born in late summer and early fall who are causing their death by entering in relationships with individuals who will kill them in numerous individuals of the population of Québec are causing the observation, if so, it can be predicted that old males born in late summer and early fall related to the numerous old males born in late summer and early fall deceased assassinated having in their genome such a genotype will likely die assassinated after having entered in relationships with individuals who will kill them. If so, it might be possible to prevent the death of these old males born in late summer and early fall by preventing these old males from getting in relationships with individuals who will kill them. Also, if the proposed genotypes are in numerous individuals of the population of Québec, causing the observation, individuals related to these numerous old males born in late summer and early fall deceased assassinated can have in their reproductive cells the genotypes engendering male descendants born in late summer and early fall dying assassinated by entering in relationships with individuals who will kill them and can avoid to conceive sons who will die from this cause by avoiding to conceive with their reproductive cells containing a proposed genotype sons in late fall and early winter (between early December and early January) to avoid the birth of their sons in late summer and early fall (between early September and early October). If these numerous old males born in late summer and early fall deceased assassinated are not related and have not caused their assassination by having entered in relationships with individuals who have killed them, it is proposed that genotypes engendering individuals who are causing the death of old males born in late summer and early fall by killing them found in numerous individuals of the population of Québec explain the observation. If so, it can be predicted that individuals who have caused the death of these old males born in late summer and early fall by killing them are related, having in their genome a genotype engendering individuals causing the death of old males born in late summer and early fall by killing them inherited from common genitors and that they are likely, as well as other individuals related to these individuals, to cause the death of old males born in late summer and early fall by killing them. If so, the prevention of the death of old males born in late summer and early fall could be possible by preventing these individuals having such a proposed genotype in their genome from killing old males born in late summer and early fall.

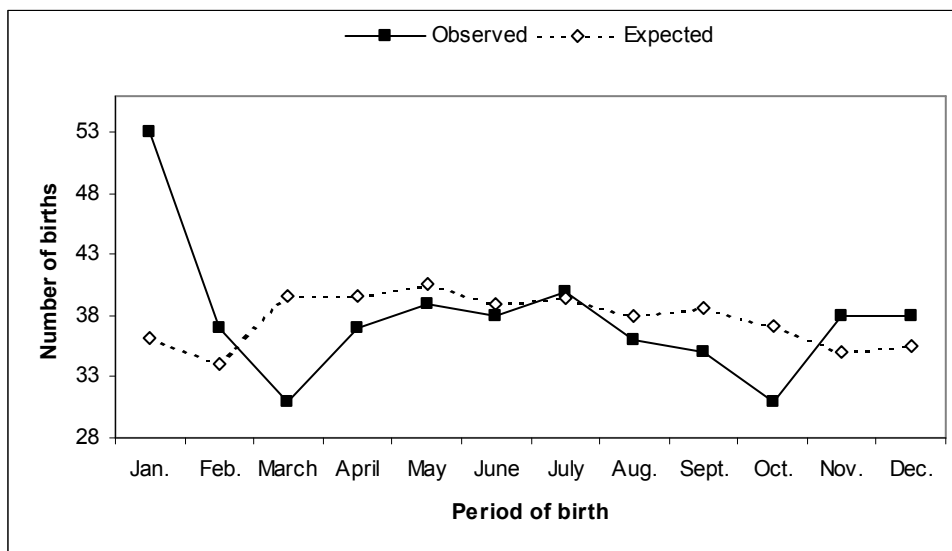
Figure 46. Observed and expected number of births according to seasonal periods of the year of old males of the population of the province of Québec deceased assassinated aged between 61 and 69 years old between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Male Firearm Homicide

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering young adult males who are dying assassinated with a firearm following a birth in different seasonal periods and the numerous young adult males of the population of the province of Québec deceased assassinated with a firearm born in winter (in January, $\chi^2(1) = 7,85 p < 0,01$) presented on Figure 47 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering young adult males dying assassinated with a firearm following a birth in winter. If these numerous young adult males born in winter deceased assassinated with a firearm are related, it can be postulated that genotypes engendering young adult males born in winter who are causing their death by entering in relationships with individuals who will kill them with a firearm in numerous individuals of the population of Québec are causing the observation, if so, it can be predicted that young adult males born in winter related to the numerous young adult males born in winter deceased assassinated with a firearm having in their genome such a genotype will likely die assassinated with a firearm after having entered in relationships with individuals who will kill them with a firearm. If so, it might be possible to prevent the death of these young adult males born in winter by preventing these young adult males from entering in relationships with individuals who will kill them with a firearm. Also, if the proposed genotypes are in numerous individuals of the population of Québec, causing the observation, individuals related to these numerous young adult males born in winter deceased assassinated with a firearm can have in their reproductive cells the genotypes engendering male descendants born in winter dying assassinated with a firearm by entering in relationships with individuals who will kill them with a firearm and can avoid to conceive sons who will die from this cause by avoiding to conceive with their reproductive cells containing a proposed genotype sons in spring (in April) to avoid the birth of their sons in winter (in January). If these numerous young adult males born in winter deceased assassinated with a firearm are not related and have not caused their assassination with a firearm by having entered in relationships with individuals who have killed them with a firearm, it is proposed that genotypes engendering individuals who are causing the death of young adult males born in winter by killing them with a firearm found in numerous individuals of the population of Québec explain the observation. If so, it can be predicted that individuals who have caused the death of these young adult males born in winter by killing them with a firearm are related, having in their genome a genotype engendering individuals causing the death of young adult males born in winter by killing them with a firearm inherited from common genitors and that they are likely, as well as other individuals related to these individuals, to cause the death of young adult males born in winter by killing them with a firearm. If so, the prevention of the death of young adult males born in winter could be possible by preventing these individuals having such a proposed genotype in their genome from killing young adult males born in winter with a firearm.

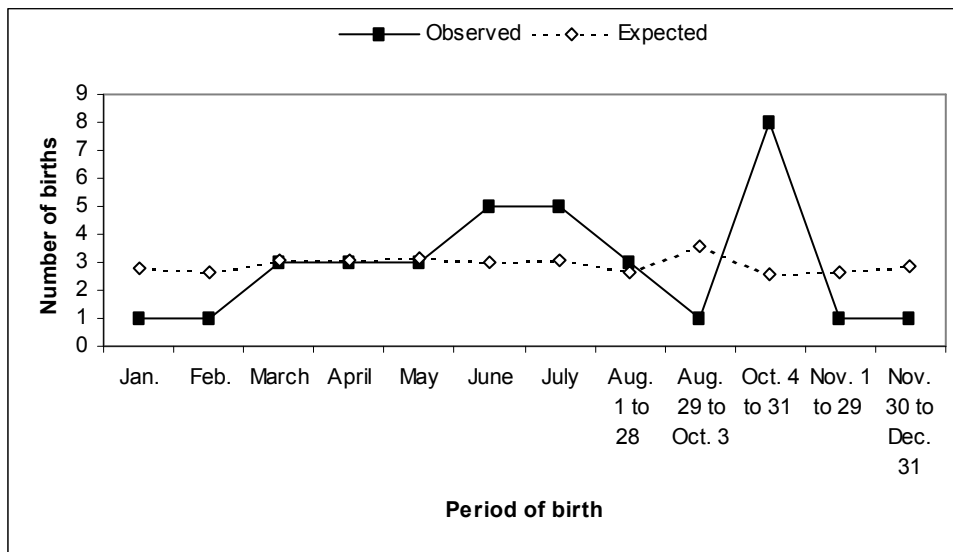
Figure 47. Observed and expected number of births according to seasonal periods of the year of young adult males of the population of the province of Québec deceased assassinated with a firearm aged between 18 and 41 years old between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Female Firearm Homicide

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering adult females who are dying assassinated with a firearm following a birth in different seasonal periods and the numerous adult females of the population of the province of Québec deceased assassinated with a firearm born in fall (from October 4 to 31, $\chi^2 (1) = 11,30$ $p < 0,001$) presented on Figure 48 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering adult females dying assassinated with a firearm following a birth in fall. If these numerous adult females born in fall deceased assassinated with a firearm are related, it can be postulated that genotypes engendering adult females born in fall who are causing their death by entering in relationships with individuals who will kill them with a firearm in numerous individuals of the population of Québec are causing the observation, if so, it can be predicted that adult females born in fall related to the numerous adult females born in fall deceased assassinated with a firearm having in their genome such a genotype will likely die assassinated with a firearm after having entered in relationships with individuals who will kill them with a firearm. If so, it might be possible to prevent the death of these adult females born in fall by preventing these adult females from entering in relationships with individuals who will kill them with a firearm. Also, if the proposed genotypes are in numerous individuals of the population of Québec, causing the observation, individuals related to these numerous adult females born in fall deceased assassinated with a firearm can have in their reproductive cells the genotypes engendering female descendants born in fall dying assassinated with a firearm by entering in relationships with individuals who will kill them with a firearm and can avoid to conceive daughters who will die from this cause by avoiding to conceive with their reproductive cells containing a proposed genotype daughters in spring (in January) to avoid the birth of their daughters in fall (in October). If these numerous adult females born in fall deceased assassinated with a firearm are not related and have not caused their assassination with a firearm by having entered in relationships with individuals who have killed them with a firearm, it is proposed that genotypes engendering individuals who are causing the death of adult females born in fall by killing them with a firearm found in numerous individuals of the population of Québec explain the observation. If so, it can be predicted that individuals who have caused the death of these adult females born in fall by killing them with a firearm are related, having in their genome a genotype engendering individuals causing the death of adult females born in fall by killing them with a firearm inherited from common genitors and that they are likely, as well as other individuals related to these individuals, to cause the death of adult females born in fall by killing them with a firearm. If so, the prevention of the death of adult females born in fall could be possible by preventing these individuals having such a proposed genotype in their genome from killing adult females born in fall with a firearm.

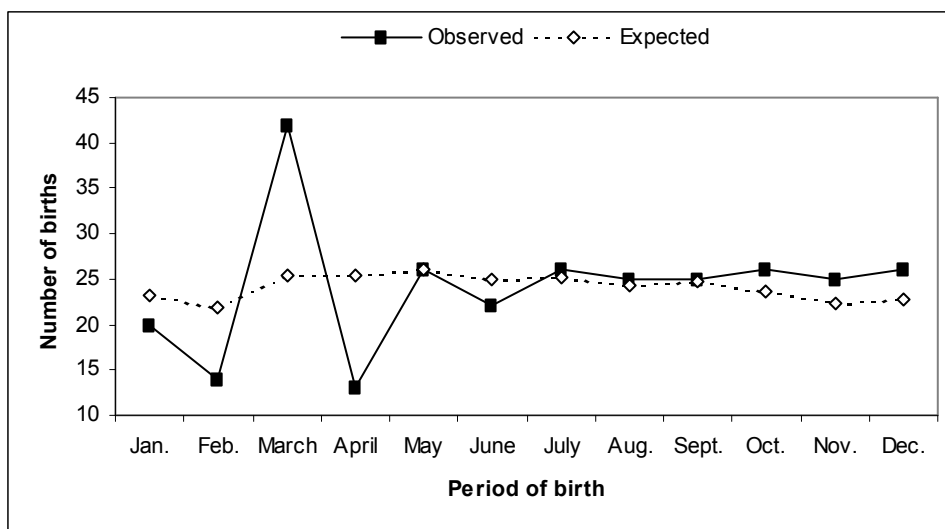
Figure 48. Observed and expected number of births according to seasonal periods of the year of adult females of the population of the province of Québec deceased assassinated with a firearm aged between 39 and 58 years old between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Male Blade Weapon Homicide

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering males who are dying assassinated with a blade weapon following a birth in different seasonal periods and the numerous males of the population of the province of Québec deceased assassinated with a blade weapon born in late winter and early spring (in March, $\chi^2(1) = 10,84$ $p < 0,001$) presented on Figure 49 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering males dying assassinated with a blade weapon following a birth in late winter and early spring. If these numerous males born in late winter and early spring deceased assassinated with a blade weapon are related, it can be postulated that genotypes engendering males born in late winter and early spring who are causing their death by entering in relationships with individuals who will kill them with a blade weapon in numerous individuals of the population of Québec are causing the observation, if so, it can be predicted that males born in late winter and early spring related to the numerous males born in late winter and early spring deceased assassinated with a blade weapon having in their genome such a genotype will likely die assassinated with a blade weapon after having entered in relationships with individuals who will kill them with a blade weapon. If so, it might be possible to prevent the death of these males born in late winter and early spring by preventing these males from entering in relationships with individuals who will kill them with a blade weapon. Also, if the proposed genotypes are in numerous individuals of the population of Québec, causing the observation, individuals related to these numerous males born in late winter and early spring deceased assassinated with a blade weapon can have in their reproductive cells the genotypes engendering male descendants born in late winter and early spring dying assassinated with a blade weapon by entering in relationships with individuals who will kill them with a blade weapon and can avoid to conceive sons who will die from this cause by avoiding to conceive with their reproductive cells containing a proposed genotype sons in late spring and early summer (in June) to avoid the birth of their sons in late winter and early spring (in March). If these numerous males born in late winter and early spring deceased assassinated with a blade weapon are not related and have not caused their assassination by having entered in relationships with individuals who have killed them with a blade weapon, it is proposed that genotypes engendering individuals who are causing the death of males born in late winter and early spring by killing them with a blade weapon found in numerous individuals of the population of Québec explain the observation. If so, it can be predicted that individuals who have caused the death of these males born in late winter and early spring by killing them with a blade weapon are related, having in their genome a genotype engendering individuals causing the death of males born in late winter and early spring by killing them with a blade weapon inherited from common genitors and that they are likely, as well as other individuals related to these individuals, to cause the death of males born in late winter and early spring by killing them with a blade weapon. If so, the prevention of the death of males born in late winter and early spring could be possible by preventing these individuals having such a proposed genotype in their genome from killing males born in late winter and early spring with a blade weapon.

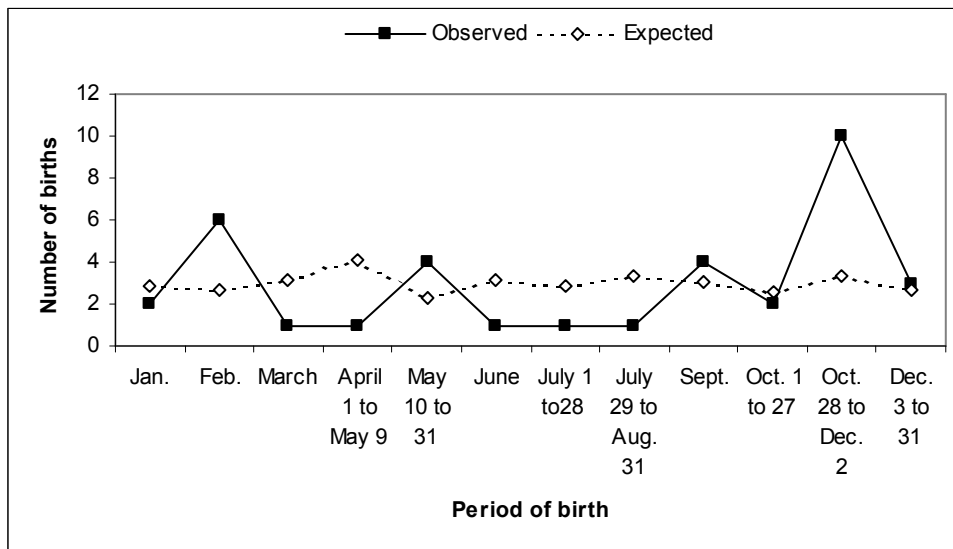
Figure 49. Observed and expected number of births according to seasonal periods of the year of males of the population of the province of Québec deceased assassinated with a blade weapon aged between 16 and 65 years old between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Strangulation Female Homicide

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering young females who are dying assassinated by strangulation following a birth in different seasonal periods and the numerous young females of the population of the province of Québec deceased assassinated by strangulation born in fall (between October 28 and December 2, $\chi^2(1) = 13,28 p < 0,001$) presented on Figure 50 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering young females dying assassinated by strangulation following a birth in fall. If these numerous young females born in fall deceased assassinated by strangulation are related, it can be postulated that genotypes engendering young females born in fall who are causing their death by entering in relationships with individuals who will kill them by strangulation in numerous individuals of the population of Québec are causing the observation, if so, it can be predicted that young females born in fall related to the numerous young females born in fall deceased assassinated by strangulation having in their genome such a genotype will likely die assassinated after having entered in relationships with individuals who will kill them by strangulation. If so, it might be possible to prevent the death of these young females born in fall by preventing these young females from entering in relationships with individuals who will kill them by strangulation. Also, if the proposed genotypes are in numerous individuals of the population of Québec, causing the observation, individuals related to these numerous young females born in fall deceased assassinated by strangulation can have in their reproductive cells the genotypes engendering female descendants born in fall dying assassinated by strangulation by entering in relationships with individuals who will kill them by strangulation and can avoid to conceive daughters who will die from this cause by avoiding to conceive with their reproductive cells containing a proposed genotype daughters in winter (between late January and early March) to avoid the birth of their daughters in fall (between late October and early December). If these numerous young females born in fall deceased assassinated by strangulation are not related and have not caused their assassination by having entered in relationships with individuals who have killed them by strangulation, it is proposed that genotypes engendering individuals who are causing the death of young females born in fall by killing them by strangulation found in numerous individuals of the population of Québec explain the observation. If so, it can be predicted that individuals who have caused the death of these young females born in fall by killing them by strangulation are related, having in their genome a genotype engendering individuals causing the death of young females born in fall by killing them by strangulation inherited from common genitors and that they are likely, as well as other individuals related to these individuals, to cause the death of young females born in fall by killing them by strangulation. If so, the prevention of the death of young females born in fall could be possible by preventing these individuals having such a proposed genotype in their genome from killing young females born in fall by strangulation.

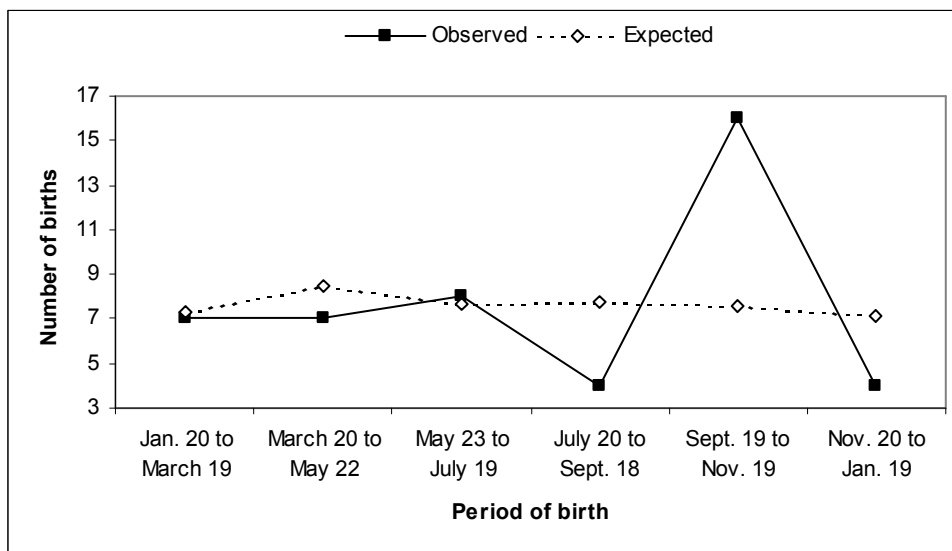
Figure 50. Observed and expected number of births according to seasonal periods of the year of young females of the population of the province of Québec deceased assassinated by strangulation aged between 19 and 36 years old between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Blunt Object Female Homicide

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering adult females who are dying assassinated with a blunt object following a birth in different seasonal periods and the numerous adult females of the population of the province of Québec deceased assassinated with a blunt object born in fall (between September 19 and November 19, $\chi^2(1) = 9,32$ $p < 0,01$) presented on Figure 51 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering adult females dying assassinated with a blunt object following a birth in fall. If these numerous adult females born in fall deceased assassinated with a blunt object are related, it can be postulated that genotypes engendering adult females born in fall who are causing their death by entering in relationships with individuals who will kill them with a blunt object in numerous individuals of the population of Québec are causing the observation, if so, it can be predicted that adult females born in fall related to the numerous adult females born in fall deceased assassinated with a blunt object having in their genome such a genotype will likely die assassinated after having entered in relationships with individuals who will kill them with a blunt object. If so, it might be possible to prevent the death of these adult females born in fall by preventing these adult females from entering in relationships with individuals who will kill them with a blunt object. Also, if the proposed genotypes are in numerous individuals of the population of Québec, causing the observation, individuals related to these numerous adult females born in fall deceased assassinated with a blunt object can have in their reproductive cells the genotypes engendering female descendants born in fall dying assassinated with a blunt object by entering in relationships with individuals who will kill them with a blunt object and can avoid to conceive daughters who will die from this cause by avoiding to conceive with their reproductive cells containing a proposed genotype daughters in winter (between late December and late February) to avoid the birth of their daughters in fall (between late September and late November). If these numerous adult females born in fall deceased assassinated with a blunt object are not related and have not caused their assassination by having entered in relationships with individuals who have killed them with a blunt object, it is proposed that genotypes engendering individuals who are causing the death of adult females born in fall by killing them with a blunt object found in numerous individuals of the population of Québec explain the observation. If so, it can be predicted that individuals who have caused the death of these adult females born in fall by killing them with a blunt object are related, having in their genome a genotype engendering individuals causing the death of adult females born in fall by killing them with a blunt object inherited from common genitors and that they are likely, as well as other individuals related to these individuals, to cause the death of adult females born in fall by killing them with a blunt object. If so, the prevention of the death of adult females born in fall could be possible by preventing these individuals having such a proposed genotype in their genome from killing adult females born in fall with a blunt object.

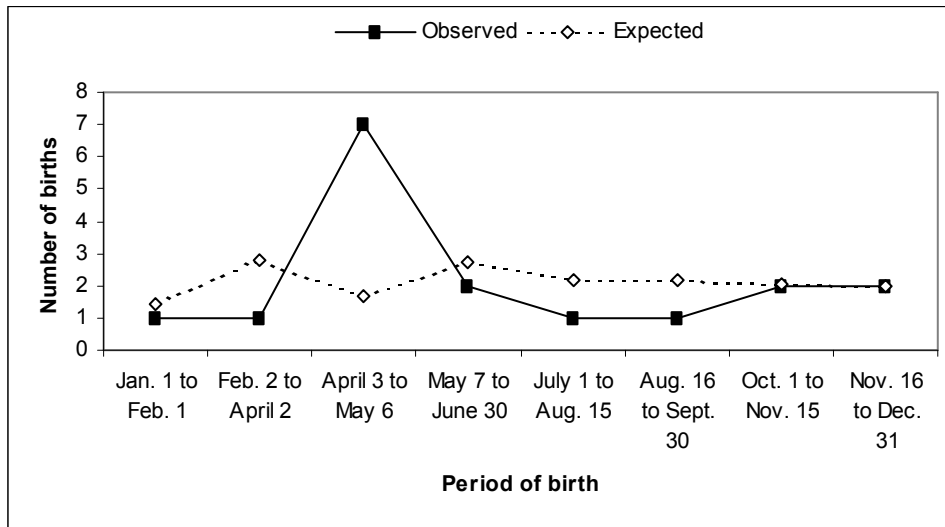
Figure 51. Observed and expected number of births according to seasonal periods of the year of adult females of the population of the province of Québec deceased assassinated with a blunt object aged between 38 and 70 years old between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Female Fire Homicide

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering females who are dying assassinated in a fire following a birth in different seasonal periods and the numerous females of the population of the province of Québec deceased assassinated in a fire born in spring (between April 3 and May 6, $\chi^2(1) = 16,85$ $p < 0,001$) presented on Figure 52 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering females dying assassinated in a fire following a birth in spring. If these numerous females born in spring deceased assassinated in a fire are related, it can be postulated that genotypes engendering females born in spring who are causing their death by entering in relationships with individuals who will kill them in a fire in numerous individuals of the population of Québec are causing the observation, if so, it can be predicted that females born in spring related to the numerous females born in spring deceased assassinated in a fire having in their genome such a genotype will likely die assassinated in a fire after having entered in relationships with individuals who will kill them in a fire. If so, it might be possible to prevent the death of these females born in spring by preventing these females from entering in relationships with individuals who will kill them in a fire. Also, if the proposed genotypes are in numerous individuals of the population of Québec, causing the observation, individuals related to these numerous females born in spring deceased assassinated in a fire can have in their reproductive cells the genotypes engendering female descendants born in spring dying assassinated in a fire by entering in relationships with individuals who will kill them in a fire and can avoid to conceive daughters who will die from this cause by avoiding to conceive with their reproductive cells containing a proposed genotype daughters in summer (between early July and early August) to avoid the birth of their daughters in spring (between early April and early May). If these numerous females born in spring deceased assassinated in a fire are not related and have not caused their assassination by entering in relationships with individuals who have killed them in a fire, it is proposed that genotypes engendering individuals who are causing the death of females born in spring by killing them in a fire found in numerous individuals of the population of Québec explain the observation. If so, it can be predicted that individuals who have caused the death of these females born in spring by killing them in a fire are related, having in their genome a genotype engendering individuals causing the death of females born in spring by killing them in a fire inherited from common genitors and that they are likely, as well as other individuals related to these individuals, to cause the death of females born in spring by killing them in a fire. If so, the prevention of the death of females born in spring could be possible by preventing these individuals having such a proposed genotype in their genome from killing females born in spring in a fire.

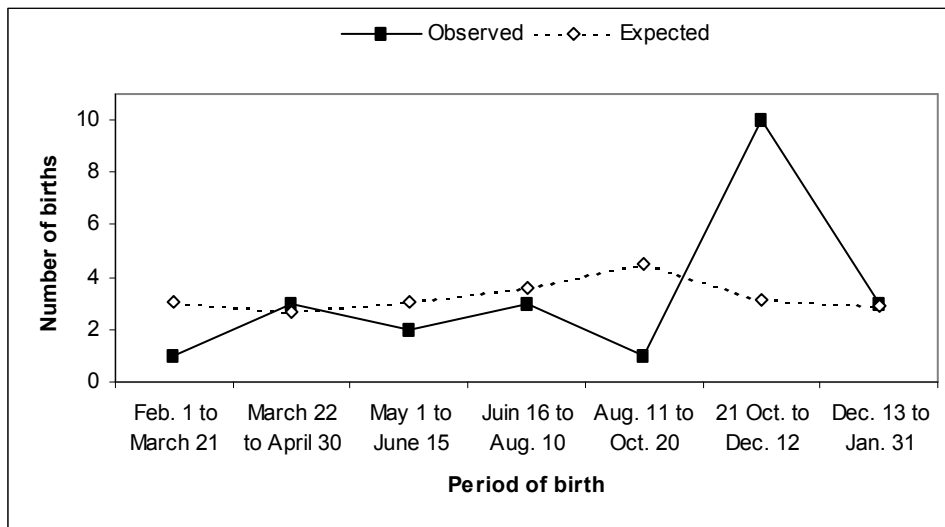
Figure 52. Observed and expected number of births according to seasonal periods of the year of females of the population of the province of Québec deceased assassinated in a fire between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Male Explosion Homicide

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering males who are dying assassinated by an explosion following a birth in different seasonal periods and the numerous males of the population of the province of Québec deceased assassinated by an explosion born in late fall (between October 21 and December 12, $\chi^2(1) = 14,90$ $p < 0,001$) presented on Figure 53 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering males dying assassinated by an explosion following a birth in late fall. If these numerous males born in late fall deceased assassinated by an explosion are related, it can be postulated that genotypes engendering males born in late fall who are causing their death by entering in relationships with individuals who will kill them by an explosion in numerous individuals of the population of Québec are causing the observation, if so, it can be predicted that males born in late fall related to the numerous males born in late fall deceased assassinated by an explosion having in their genome such a genotype will likely die assassinated by an explosion after having entered in relationships with individuals who will kill them by an explosion. If so, it might be possible to prevent the death of these males born in late fall by preventing these males from entering in relationships with individuals who will kill them by an explosion. Also, if the proposed genotypes are in numerous individuals of the population of Québec, causing the observation, individuals related to these numerous males born in late fall deceased assassinated by an explosion can have in their reproductive cells the genotypes engendering male descendants born in late fall dying assassinated by an explosion by entering in relationships with individuals who will kill them by an explosion and can avoid to conceive sons who will die from this cause by avoiding to conceive with their reproductive cells containing a proposed genotype sons in late winter (between late January and mid-March) to avoid the birth of their sons in late fall (between late October and mid-December). If these numerous males born in late fall deceased assassinated by an explosion are not related and have not caused their assassination by entering in relationships with individuals who have killed them by an explosion, it is proposed that genotypes engendering individuals who are causing the death of males born in late fall by killing them by an explosion found in numerous individuals of the population of Québec explain the observation. If so, it can be predicted that individuals who have caused the death of these males born in late fall by killing them by an explosion are related, having in their genome a genotype engendering individuals causing the death of males born in late fall by killing them by an explosion inherited from common genitors and that they are likely, as well as other individuals related to these individuals, to cause the death of males born in late fall by killing them by an explosion. If so, the prevention of the death of males born in late fall could be possible by preventing these individuals having such a proposed genotype in their genome from killing males born in late fall by an explosion.

Figure 53. Observed and expected number of births according to seasonal periods of the year of males of the population of the province of Québec deceased assassinated by an explosion between 1987 and 1999 (Source: Bureau du Coroner du Québec).



Male Fight Homicide

According to the genotypic theory on mortality postulating the existence of different genotypes engendering individuals dying of different causes following a birth in different seasonal periods found in different frequencies in individuals of populations (Turmel, 2007c), different genotypes in individuals of populations found in different frequencies are engendering young males who are dying in a fight following a birth in different seasonal periods and the numerous young males of the population of the province of Québec deceased in a fight born in summer (between July 1 and 19, $\chi^2(1) = 25,56$ $p < 0,001$) presented on Figure 54 are caused by numerous individuals of the population of Québec having in their genome genotypes engendering young males dying in a fight following a birth in summer. If these numerous young males born in summer deceased in a fight are related, it can be postulated that genotypes engendering young males born in summer who are causing their death by entering in relationships with individuals who will kill them in a fight in numerous individuals of the population of Québec are causing the observation, if so, it can be predicted that young males born in summer related to the numerous young males born in summer deceased in a fight having in their genome such a genotype will likely die in a fight after having entered in relationships with individuals who will kill them in a fight. If so, it might be possible to prevent the death of these young males born in summer by preventing these young males from entering in relationships with individuals who will kill them in a fight. Also, if the proposed genotypes are in numerous individuals of the population of Québec, causing the observation, individuals related to these numerous young males born in summer deceased in a fight can have in their reproductive cells the genotypes engendering male descendants born in summer dying in a fight by entering in relationships with individuals who will kill them in a fight and can avoid to conceive sons who will die from this cause by avoiding to conceive with their reproductive cells containing a proposed genotype sons in fall (in October) to avoid the birth of their sons in summer (in July). If these numerous young males born in summer deceased in a fight are not related and have not caused their assassination by entering in relationships with individuals who have killed them in a fight, it is proposed that genotypes engendering individuals who are causing the death of young males born in summer by killing them in a fight found in numerous individuals of the population of Québec explain the observation. If so, it can be predicted that individuals who have caused the death of these young males born in summer by killing them in a fight are related, having in their genome a genotype engendering individuals causing the death of young males born in summer by killing them in a fight inherited from common genitors and that they are likely, as well as other individuals related to these individuals, to cause the death of young males born in summer by killing them in a fight. If so, the prevention of the death of young males born in summer could be possible by preventing these individuals having such a proposed genotype in their genome from killing young males born in summer in a fight.

Figure 54. Observed and expected number of births according to seasonal periods of the year of young males of the population of the province of Québec deceased in a fight aged between 15 and 36 years old between 1987 and 1999 (Source: Bureau du Coroner du Québec).

