

# Gambling-Related Employee Embezzlement: A Study of Swedish Newspaper Reports

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## Abstract

It is well-known that severe problem gambling may lead to economic crime. This study explored a particular type of such criminality: embezzlement committed by problem gamblers in the workplace. The aim was to gain knowledge about the extent of such criminality in Sweden and the sums of money involved. The method used was a media study of newspaper reports, complemented with information about help-seeking problem gamblers obtained in interviews with therapists specializing in problem gambling and with peer counsellors in mutual support societies of problem gamblers. The results showed that gambling-related embezzlement occurs in all branches of the economy where employees have access to money. The sums embezzled can be huge and the crimes sustained over several years. However, this varies across professional categories, with bank managers embezzling larger sums of money than others, and for longer, before being detected. Although Swedish newspapers report on average about one case a month of gambling-related employee embezzlement, the true prevalence is likely to be at least 10 times higher. More efforts should be made to prevent embezzlement and other gambling-related harms in the workplace.

**Keywords:** problem gambling, crime, embezzlement, workplace

## Résumé

On sait que le jeu problématique grave peut mener à la criminalité économique. Cette étude porte sur un aspect particulier de ce type de criminalité, soit le détournement commis par des joueurs problématiques dans leur milieu de travail. Elle vise à établir l'étendue de cette criminalité en Suède et les sommes d'argent en cause. À cette fin, on a effectué une analyse média des articles de journaux ainsi que des renseignements sur les joueurs problématiques ayant demandé de l'aide recueillis dans des entrevues avec des thérapeutes spécialisés en jeu problématique et avec des pairs-conseillers de groupes de soutien pour les joueurs problématiques. Il a été constaté que le détournement lié au jeu problématique se produit dans tous les secteurs de l'économie où les employés ont accès à l'argent. Les sommes détournées peuvent être considérables et les crimes, se perpétrer sur plusieurs années. La

situation varie toutefois selon la catégorie des professions, les directeurs de banque détournant des sommes plus élevées que les autres, et pendant de plus longues périodes, avant d'être découverts. Bien que les journaux suédois ne rapportent en moyenne qu'un cas de détournement par un employé joueur pathologique par mois, cette étude laisse entendre que la prévalence réelle est probablement dix fois plus élevée. Il est conclu que plus d'efforts doivent être faits pour prévenir le détournement et les autres dommages liés au jeu dans le milieu de travail.

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## Introduction

Although commercial gambling offers the pleasant dream of becoming rich, the joy of occasional wins, excitement, and opportunities for socializing (Binde, 2013), it also has its dark side. Problem gambling—also known as disordered gambling and in its severe form as gambling addiction—brings harm to the individual, significant others, and society more generally (Abbott et al., 2015; Langham et al., 2016). The individual suffers adverse consequences regarding his or her personal finances, general well-being, social relationships, and educational or professional life. Although difficult to estimate precisely, the social costs of problem gambling to society are likely significant (Productivity Commission, 2010, Chapter 6).

In commercial gambling, operators do not pay as much money to winning gamblers as they earn from losing gamblers. Therefore, gambling is in the long run profitable for gambling companies but unprofitable for gamblers. The more one gambles, the more one is likely to lose, and intense gambling costs huge sums of money. This constitutes the core problem for problem gamblers, who have impaired control over the extent of their gambling.

Individuals with severe gambling problems typically first exhaust their own financial resources and then seek to obtain more money in various ways. They may take loans, sell personal belongings, and eventually commit crimes. The nature of such criminality differs depending on incidental opportunities and on the abilities and social position of the gambler.

This article presents the results of an exploratory investigation of gambling-related embezzlement in the workplace, a topic rarely discussed in gambling studies. The investigation was initiated because anecdotal accounts suggested that such criminality causes particularly severe harm to the gambler, significant others, and the employer. In Sweden, representatives of employers, trade unions, and the Public Health Agency—which financed this investigation—wanted more knowledge about this aspect of problem gambling, as well as suggestions for preventive measures.

A multimodal methodological approach was used in this investigation, including interviews with different categories of informants and a study of newspaper articles.

This article reports quantitative results of the media study, supplemented by information from interviews. A second article outlines the typical case of gambling-related embezzlement in the workplace, as well as variations and other scenarios (Binde, 2016a). A third article discusses preventive strategies and interventions (2016b).

For those who are not familiar with gambling in Sweden, a brief outline will help to situate the study in a national context (for overviews, see Binde, 2014; Jonsson & Rönnerberg, 2009). According to a population study conducted in 2008-2009, slightly more than 70% of the adult population participate in gambling at least yearly, and about 44% of adult Swedes gamble regularly, that is, monthly or more often (Public Health Agency of Sweden, 2016). A wide variety of forms of gambling are offered by operators regulated in Sweden, including online poker, whereas other online casino games are offered only by companies operating from abroad without licenses in Sweden. In contrast to their regulation in some other countries, electronic gaming machines (EGMs) are tightly regulated in a state monopoly, with fewer than 7,000 EGMs outside of casinos (in a population of 9.6 million). There are four state-owned international-style casinos. Problem gambling prevalence is about 2% of the adult population and thus similar to the prevalence in many other Western countries. Judging from statistics about callers to the national helpline for problem gamblers, online casino, in particular online slots, is currently the most problematic form of gambling (about 50% of callers). Awareness in Sweden about the harms that gambling may cause is relatively high, including public health initiatives, reasonable availability of various forms of treatment and support, and regulation with the aim of finding a balance between allowing gambling to be available to consumers and reducing its harms. Thus, although gambling in Sweden might have some peculiar features, by and large the gambling scene is similar to that in other Western countries with a sizable gambling market. This makes the results of this study of potential interest for problem gambling research and prevention in other jurisdictions.

## **Review of the Literature**

The association between problem gambling and crime is well-known. Numerous studies have found that approximately 10%–50% of problem gamblers have committed crimes related to gambling (for overviews, see Folino & Abait, 2009; Productivity Commission, 1999, Section 7.4; Zorland, Mooss, & Perkins, 2008). Although some criminals become problem gamblers, it is more common for problem gamblers to become criminals when they commit illegal acts to finance their gambling (Lind, Kääriäinen, & Kuoppamäki, 2015; Turner, Preston, McAvoy, & Gillam, 2013).

The 4<sup>th</sup> edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) diagnostic criteria for pathological gambling includes a criterion relating to criminality—“committed illegal acts to finance gambling” (American Psychiatric Association [APA], 1994). Analysis of prevalence study data and of samples from correctional populations has indicated that the more severe the gambling problems, the larger the proportion of individuals meeting this criterion (Strong & Kahler, 2007; Turner, Stinchfield, McCready, McAvoy, & Ferentzy, 2016). In the 5th edition

of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)* (APA, 2013), the “illegal acts” criterion has been removed, however, because it did not contribute substantially to diagnostic accuracy; individuals meeting this criterion nearly always meet multiple other criteria (Petry et al., 2014; Petry, Blanco, Stinchfield, & Volberg, 2013). Nevertheless, in the *DSM-5*, criminal acts are subsumed under criterion A7, “lies to conceal the extent of involvement in gambling,” as this includes “covering up illegal behaviors such as forgery, fraud, theft, or embezzlement to obtain money with which to gamble” (APA, 2013, p. 586). The commitment of financial crime is thus still a behaviour of relevance when assessing gambling disorder, which has been shown in regard to clinical practice (Stinchfield et al., 2016), prison populations (Turner et al., 2016), and college athletes (Temcheff, Paskus, Potenza, & Derevensky, 2016).

Most crimes committed by problem gamblers are economic (Blaszczynski & McConaghy, 1994; Lind et al., 2015; Meyer & Stadler, 1999; Turner, Preston, Saunders, McAvoy, & Jain, 2009; Zurhold, Verthein, & Kalke, 2014), for example, theft, forgery, fraud, and the type of crime that this article examines: embezzlement in the workplace.

A substantial proportion of severe problem gamblers have embezzled in the workplace. In his classic sociological study, *The Chase: Career of the Compulsive Gambler*, Henry Lesieur (1984, p. 276f) found that about one third of the 50 pathological gamblers studied, most of them Gamblers Anonymous (GA) attendees, had embezzled. Similar proportions of embezzlers and gamblers stealing from the workplace (22%–37%) have been found in other studies of GA attendees and problem gamblers in treatment (Blaszczynski & McConaghy, 1994; Ladouceur, Boisvert, Pépin, Loranger, & Sylvain, 1994; Meyer & Stadler, 1999; Schwer, Thompson, & Nakamuro, 2003; Thompson, Gazel, & Rickman, 1996). A 20-year-old Swedish study of 42 pathological gamblers recruited in various ways (e.g., GA attendees, via social welfare authorities, and through media advertisements) found that 14% reported work-related theft, fraud, and embezzlement (Bergh & Kühllhorn, 1994). A more recent Norwegian study, examining a sample of 118 problem gamblers (help seekers and individuals identified in a survey of employees in the transport industry) found that 10% had stolen money from colleagues, 20% had “borrowed” money belonging to the employer, and 11% had stolen money from the employer (Buvik, 2009, p. 84).

In the 1940s, a survey of 20 surety and insurance companies in the United States found that gambling was one of the most common reasons for embezzlement and theft at places of work (Peterson, 1947). According to the surveyed employers’ estimates, 30%–75% of the total losses caused by employee dishonesty were related to gambling. In a more recent study in the United States that examined publicly known cases of major embezzlement in the period 2008–2012, the motivating factor was identified in 448 of 2,110 cases—among these cases, nearly a third of embezzlers reportedly had a gambling issue (Marquet International, 2013).

Criminological studies show that problem gambling is a common motive for embezzling and workplace fraud. An Australian study found that 15% of those sentenced for serious fraud cited gambling as the reason for committing the crime

and that nearly half of these gambling-related crimes were committed against employers (Sakurai & Smith, 2003). Another Australian study, analysing 208 court cases of serious fraud, found that gambling was the motive in 23% of cases (R. G. Smith, 2003). A third study from Australia found that of a total of 186 “larceny by servant/clerk” cases, 15%–20% were gambling related (Crofts, 2003a, 2003b). Two other Australian studies showed that gambling-driven employee fraud is common (Warfield, 2011) and that in the financial sector, gambling addiction is the motive in about 50% of cases (Warfield, 2013). In Germany, a study of court cases concerning crimes committed by problem gamblers found that 15% of cases involved embezzlement (Meyer & Fabian, 1996). In a Swedish study, 85 individuals holding central positions in companies were interviewed about economic crimes committed by employees; the study concluded that embezzlement is often caused by “personal tragedies,” such as “gambling addiction and alcoholism” (Liljewalch, 2003).

A characteristic of embezzling in the workplace is that it cannot normally occur unless the offender has gained a position of trust. Most embezzlers are therefore apparently “normal,” well-adjusted individuals with permanent work. This also seems to be the case when problem gambling is the underlying cause of embezzlement. A commonly occurring type of gambling-related embezzlement is the faithful servant who develops a severe but concealed gambling problem, “borrows” money for gambling from the workplace in the hope of recouping losses and when in desperate need for money for household expenses, and continues to lose money at gambling and to embezzle until the crime is detected (Binde, 2016a; Brown, 1987; Crofts, 2003b; Kelly & Hartley, 2010; Lesieur, 1984; Sakurai & Smith, 2003; G. Smith & Simpson, 2014). This picture of gambling-driven embezzlement corresponds to the picture of embezzling more generally, rendered in criminological research (Cressey, 1973; Zietz, 1981).

### Method

The Retriever database *Mediearkivet* was searched to find articles about embezzlement committed in the workplace by problem gamblers. *Mediearkivet* is Scandinavia’s largest digital news archive with articles from all Swedish national newspapers, most regional and local newspapers, and hundreds of journals and magazines.

The search covered the 5 years from July 1, 2009, to June 30, 2014. The search criteria were that articles must include any of the three most commonly used Swedish terms for problem gambling: *spelberoende* (gambling addiction), *spelproblem* (problem gambling), or *spelmissbruk* (gambling abuse).

Of the 5,304 articles found, I read the headline and preamble of each and found approximately 300 articles on the topic of interest. Besides employee embezzlement, similar crimes were also considered. In Swedish legal classification, crimes in which money is misappropriated from the employer or from the employer’s customers, such as the account holders in a bank, may be classified as embezzlement, disloyalty to principal, fraud, or theft, depending on the circumstances. Disloyalty to principal

is similar to embezzlement in that damage is caused to the employer, but it does not require the perpetrator to have, in a judicial sense, possessed the money (it might instead have been transferred from the employer to someone else) and benefited from the crime. Thus, if there is doubt that possession and benefit can be proven in court, a prosecutor may choose to classify a crime as disloyalty to principal rather than embezzlement; the penalties for these two crimes do not differ much. However, gambling-related thefts of material goods at the place of work and thefts of money from colleagues were not included in this study.

I read the 300 newspaper articles carefully and found them to cover 55 specific cases, most being covered in several articles. Some of these articles were similar because they were derived from news distributed by a national news agency. Other articles covered the same cases but at different times as new facts came to light or when the embezzlers were brought to trial, first in local courts and then in courts of appeal. In most of the 55 cases, a court had determined that intense gambling had led to embezzlement or similar economic crimes committed in the workplace, that is, violating a position of trust to appropriate money from the employer or the employer's customers.

In many cases, the newspaper articles gave a fairly comprehensive overview of the embezzlement and its context. Often the articles quoted facts revealed in the court proceedings regarding the amounts of money embezzled and the duration of the crime. In the more spectacular cases, interviews with the problem gambler, colleagues, and managers in the workplace provided information on the wider context and the modus operandi of the crime. Data on the cases were entered into an electronic spreadsheet to facilitate quantitative and qualitative analysis.

The media study alone does not indicate how common it is for problem gamblers to embezzle money from the workplace. As this is a question of interest for policy and prevention, supplementary data on gambling-related embezzlement among help-seeking problem gamblers were obtained in interviews with five therapists who specialize in problem gambling and five semi-professional peer counsellors in mutual support societies of problem gamblers. The purpose of acquiring these data was to get a rough idea of the prevalence: Are there a few cases each year, many cases a day, or something in between? It is methodologically challenging to estimate the extent of a phenomenon that is concealed because it is both illegal and perceived as shameful. However, making a rough estimate was considered better than making no estimate at all.

The 10 individuals invited to participate in interviews were, to the best of my knowledge, those in Sweden who had the greatest experience with help-seeking problem gamblers; all agreed to participate. The therapists estimated that they had had, in total, approximately 1,500 problem gamblers as clients. The counsellors claimed knowledge of thousands of help seekers in mutual support societies, although the number was difficult for some of them to estimate precisely. These qualitative semi-structured interviews were conducted in the context of the larger

investigation and included three questions used in the current analysis, in which the interviewees were asked to (a) estimate the proportion of help seekers who had embezzled, (b) the proportion of embezzlers who had been reported to the police, and (c) the proportion of help-seeking embezzlers whose crimes had been covered in the press. The interview guides with questions were sent to the participants by e-mail at least a week in advance so that they could, if they wished, consult their records and their client and counselling statistics. Most participants made such preparations so that they could answer the questions as accurately as possible. These data were entered into an electronic spreadsheet to facilitate the calculation of the interviewees' pooled estimates. For example, a particular therapist had knowledge of 250 clients and estimated that 15%–20% of them had embezzled at their places of work, which amounts to about 43 clients. Corresponding figures were calculated for the estimates of the other interviewees, and an average percentage of embezzlers among help seekers could thus be calculated by using the figures for the total number of clients and the total number of embezzlers. Similar procedures were followed for calculating the proportion of embezzlers who had been reported to the police and the proportion of embezzlers whose cases had been covered in the press.

## Results

### Newspaper Study Results

First, the limitations of using data from a media study should be noted. Newspapers report mostly on cases that have ended up in court. Local and regional newspapers may report on minor cases, but national newspapers prefer to write about spectacular cases in which the sums embezzled are huge or some unusual feature is likely to catch the interest of readers. The data from the media study are therefore not representative of gambling-related embezzlement in Sweden and do not indicate how common this type of criminality is. Nevertheless, the data are valuable because they provide detailed information on many different cases that illustrate the economic harm caused by gambling-related embezzlement.

Quantitative data from the media study are displayed in Table 1. Five professional categories are listed: (1) employees and managers responsible for financial transactions at public authorities, municipal offices, or private companies other than stores, restaurants, or banks; (2) treasurers or others with positions of trust in non-profit organizations; (3) managers or employees of stores and restaurants; (4) mid-level bank managers; and (5) others.

Women were slightly more common among the cases—about half—than among problem gamblers in the Swedish general population, where about one in five problem gamblers are women (Public Health Agency of Sweden, 2016). This may be because more women than men have jobs that give them responsibility for money at non-profit organizations and municipal and other public offices. However, it could also be that newspapers prefer to write about female rather than male embezzlers because they consider this to be more remarkable.

Table 1  
*Quantitative Results from the Media Study*

Number of cases	Professional category	Male/female/unknown sex	Sum embezzled (average) <sup>a</sup>	Sum embezzled (median) <sup>a</sup>	Duration (months, average) <sup>b</sup>	Duration (months, median) <sup>b</sup>
17	Employee or manager responsible for financial transactions at a public authority, municipal office, or private company (other than store, restaurant, or bank)	11/5/1	2,923,000	430,000	25	14
15	Treasurer or other position of trust in non-profit organization (e.g., political party, charity, trade union, sports association, or housing cooperative)	7/8/0	874,000	473,000	32	36
13	Manager or employee in store or restaurant	9/2/2	702,000	115,000	14	8
6	Bank manager (mid-level)	6/0/0	6,340,000	6,719,000	58	66
4	Other (journalist, bus driver, and unknown)	2/1/1	432,000	326,000	13	13
55	Total	35/16/4	2,060,000	386,000	28	17

<sup>a</sup> Average and median values of the sums embezzled or wrongfully appropriated are rounded to SEK thousands (two missing values). SEK 1 is roughly equivalent to EUR 0.11 or USD 0.12. <sup>b</sup> Average and median durations in months of embezzling or wrongful appropriation have 11 missing values.

In 33 of the 55 cases, the precise or approximate age of the embezzler was stated (data not shown in the table). The lowest age was 21 years, the highest 59 years, with an average of 44 years. Thus, these problem gamblers were often middle aged, which is congruent with the typical case in which the embezzler has been employed for several years and gained a position of trust.

The sums of money embezzled can be huge. The average sum embezzled by the six mid-level bank managers (all men) was more than SEK 6 million (equivalent to EUR 637,000 or USD 730,000; SEK 1 is EUR 0.11 or USD 0.12). The sums embezzled by employees working in financial positions in private companies, authorities, and municipal offices, as well as by treasurers and individuals in positions of trust in non-profit organizations, were smaller, with median values in the SEK 430,000–473,000 range; the average amounts were larger because there were a few cases in which the sums were very large. Problem gamblers employed in stores or restaurants embezzled the smallest sums, a median of SEK 115,000, probably because access to huge amounts of money is uncommon in these professions. However, the sum was very large in a case involving a department store manager, which is why the average sum is about six times as large as the median sum.



The largest amount of money embezzled, and written about in the newspapers, was SEK 20.5 million. This embezzlement took place over a period of about 5 years and was committed by a middle-aged woman working at a municipal school office. She committed suicide in connection with the discovery of the embezzlement. Therefore, no trial was held, but it has been ascertained that she spent almost all the money on online gambling (the case is described in detail in Lindstedt & Nilsson, 2015).

The period during which embezzlement is sustained can be long. The problem gamblers employed at banks embezzled for an average (median value) of 66 months, that is, more than 5 years, before their wrongdoings were discovered. Those working in stores and restaurants were discovered relatively quickly, after 8 months (median value). These differences reflect the relative ease, or difficulty, of avoiding detection in these kinds of workplaces.

### **Supplementary Results of Interviews**

In the media study, 55 cases were found over a 5-year period, meaning that at least 11 cases of gambling-related embezzlement are detected on average each year in Sweden. The true number of cases is certainly higher.

Supplementary data were obtained in interviews with five therapists and five semi-professional peer counsellors in mutual support societies. In the interviews, the therapists and peer counsellors were asked to estimate the proportion of embezzlers among their clients and peer problem gamblers whose cases had been written about in the press. All agreed that this was uncommon or very uncommon. Their pooled estimate, calculated as described in the Method section, was that about 8% had been covered in the press. According to this estimate, set in relation to the finding in the media study that on average 11 cases are reported in the press each year, the prevalence of detected gambling-related embezzlement in Sweden would be at least 137 cases a year.

Therapists and counsellors were also asked to estimate the proportion of embezzlers among their clients or peers; their pooled estimate was around 11%. Given that at least 1,000 people seek help for gambling problems each year in Sweden,<sup>1</sup> this estimate means that there are at least 110 cases of gambling-related embezzlement each year.

These two estimates, 137 and 110 cases, are of the same magnitude. Given that the estimates are approximate and that embezzlers who do not seek help for problem gambling are not included, I cautiously summarize the results as follows: In Sweden, it is likely that at least 10 cases of gambling-related embezzlement and similar economic workplace crimes are discovered each month.

Problem gambling therapists and peer counsellors were further asked to estimate how many of those who had embezzled had been brought to court and sentenced. Their pooled estimate was that only about one third of the embezzlers had been

sentenced. The others had either escaped detection (uncommon) or been discovered and discharged but not reported to the police (common). Employers refrained from reporting gambling-related embezzlement to the police because they did not wish to soil the company's reputation, did not deem it worth spending time and resources to help the police in their investigation, wished to put a quick end to the incident, felt pity for the problem gambler, or did not wish the police to investigate their business because their own unlawful activities might come to light.

### Discussion

This study of newspaper reporting demonstrates that gambling-related embezzlement occurs in all branches of the economy in which employees have access to money. The sums embezzled can be huge and the crimes sustained for several years. The amounts of money that the problem gambler has access to at work, and the likelihood of avoiding detection, influence the severity of the embezzlement.

In principle, if the problem gambler has unlimited access to money, there seems to be no limit to how much he or she may spend on gambling. The largest ever gambling-related embezzlement in Sweden seems to have occurred in 1990 when a highly respected man working in international gold trading stole gold worth SEK 26 million, money that he used for betting on horses and paying usurious interest on loans he had taken for gambling (Edström, 1996, p. 68). An exceptionally extended gambling-related embezzlement was revealed in 1996 (Edström, 1996, p. 78f). A female employee had worked in a family business for 26 years. When she retired, it was found that she had embezzled millions of Swedish kronor over a period of 16 years. Internationally, it seems that the largest amount ever to have been embezzled by a gambling addict is CAD 10,200,000—the individual in this case worked in the 1980s as an assistant manager in a Canadian bank (Ross, 1987).

Problem gambling therapists and peer counsellors estimate that only about a third of detected embezzlers are brought to trial; this tallies well with the conclusion of Swedish criminologists that far from all detected economic crimes are reported to the police (Brottsförebyggande rådet, 2002).

The estimate that about 1 in 10 help-seeking problem gamblers has embezzled or stolen money from the workplace is lower than the previous figures reported in the literature of 22%–37%. Several reasons for this are possible. First, the interviewees in the present study may have underestimated the proportion of their clients who had embezzled because some clients did not tell the full story about their gambling problem. Second, some previous studies have included all kinds of theft at work, including theft of money from colleagues. Third, previous studies were conducted in the 1990s and early 2000s, when support for problem gamblers was not as available as it has been in Sweden over the past decade. The greater availability of help is likely to increase the proportion of less severe problem gamblers who seek help, which would presumably lower the proportion of severe problem gamblers, such as those who have committed crimes, among help seekers. Fourth, the use of cash in bank

and business transactions has declined in recent decades and electronic transactions have become more common. Although this creates new opportunities for advanced schemes of fraud and embezzlement, unsophisticated appropriation of money from the workplace has probably become more difficult because digital financial transactions can be more efficiently monitored and checked in audits.

Is the number of cases of gambling-driven employee embezzlement reported in the Swedish press—on average 11 cases a year—high, low, or about the same as the number reported in other countries (adjusted for differences in population size)? As no previous study has used the same methodology as was used in this research, a precise answer cannot be given to that question. However, two previous studies, one from the United States and one from Australia, are sufficiently similar in method to allow an approximate comparison. Details on how these studies were compared to the Swedish results are given in an endnote<sup>2</sup>, and in Tables 2 and 3. The American study (Marquet International, 2013) concerned cases of major embezzlement (defined as the misappropriation of at least USD 100,000) that were publicly known through newspaper reporting or from court proceedings and came to the attention of the author of the study. The results suggest a prevalence of publicly known gambling-related employee embezzlement that is the same as that found in the present study for

Table 2  
*Comparison Between This Study and Marquet International, 2013*

	This study (Sweden)	Marquet International, 2013 (USA)
Data	Comprehensive newspaper study	Publicly known cases—known through newspaper reporting or from court proceedings that came to the attention of the author of the study
Crime	Gambling-related employee embezzlement and similar crimes	Employee theft, major embezzlement, at least USD 100,000 misappropriated
Time frame	5 years (July 2009–June 2014)	5 years (2008–2012)
Number of cases	22 cases. Total number of cases was 55. In 22 of these, the equivalent of at least USD 100,000 was misappropriated	700 cases. (approximately). Total number of cases was 2,110. Among the cases in which the motivating factor was known, gambling was the motive in almost one third of the cases. If this ratio was the same among the cases in which the motivating factor was unknown, of a total of 2,110 cases in the past 5 years, about 700 cases would have been gambling related.
Population size	9.6 million (2012)	309 million (2010)
Number of cases in 5 years per million inhabitants	$22/9.6 = 2.3$ cases	$700/309 = 2.3$ cases

Table 3  
*Comparison Between This Study and Warfield, 2011*

	This study (Sweden)	Warfield, 2011 (Australia)
Data	Comprehensive newspaper study	“... an extensive review of online law judgments as well as Australian newspaper articles containing court reports that provided details of judgments” (p. 5)
Crime	Gambling-related employee embezzlement and similar crimes	Gambling-motivated fraud
Time frame	5 years (July 2009–June 2014)	3 years (2008–2010)
Number of cases	55 cases	Of a total of 181 fraud cases, employees were responsible for about 60% = 108 cases.
Population size	9.6 million (2012)	21.3 million (2009)
Number of cases per million inhabitants and per year	$55/9.6 = 5.7$ cases in 5 years; $5.7/5 = 1.1$ cases per year	$108/21.3 = 5.1$ cases in 3 years; $5.1/3 = 1.7$ cases per year

newspaper reporting. The Australian study (Warfield, 2011) concerned gambling motivated fraud and was based on a review of online law judgements and newspaper articles on court cases. The prevalence of publicly known, gambling motivated fraud committed by employees was about 55% higher than the prevalence found in the present study. Future studies might tell if these similar figures are coincidental—appearing by chance in an attempt to compare studies with different methods and measures—or reflect an actual similarity in prevalence, across contemporary Western societies, of gambling-related embezzlement that comes to public attention through newspaper reporting and/or court files. Such a similarity across societies would not be surprising if the societies have comparable standards of living, prevalence of problem gambling, judicial systems, and practices of newspaper reporting on court cases.

In this investigation, I chose to explore gambling-related embezzlement by means of newspaper reporting. A limitation of this method is that the cases I found are not representative, as they were selected by newspapers on the basis of the interest they may have for the readership. The advantage is that the method relatively easily produces substantial and detailed material covering a wide range of cases. Supplementary data from interviews with professionals with extensive knowledge of help-seeking problem gamblers allowed me to add a quantitative dimension to the media study, although it was approximate and based on estimates that might be limited in accuracy because of recall errors and incomplete knowledge of the criminality of clients in therapy and of peers in mutual support societies.

Previous studies of gambling-related economic crime have mainly used two other methods having characteristic advantages and limitations. The first method is to study court files (e.g., Crofts, 2003b). Finding cases in that way might be more time-consuming than searching for articles in a digital newspaper archive, but it is likely to yield a more complete overview of the amounts of money stolen and of the durations and circumstances of the crimes. However, studying court files provides information only on cases reported to the police and brought to court. The second method is to use data from questionnaires administered to problem gamblers who are in treatment or attending GA (e.g., Meyer & Stadler, 1999). This has the advantage of including cases not reported to the police as well as undetected cases. One disadvantage is that some problem gamblers may be reluctant to tell about crimes they have committed; in addition, the method shares the other well-known drawbacks of self-reporting, such as recall biases and errors. Furthermore, far from all problem gamblers who have embezzled money from the workplace, whether detected or not, seek help.

The aim of this study was primarily descriptive—to give an idea of the size of the sums of money misappropriated in gambling-related employee embezzlement, the duration of the crimes, and their prevalence. Qualitative results from this investigation are reported in another article (Binde, 2016a), where it is argued that classic white collar crime theory—originating with the seminal work of Edwin Sutherland (1949) and subsequently expanded with particular respect to embezzlement (Cressey, 1973; Ramamoorti, 2008; Zietz, 1981)—is useful in gambling studies for understanding how law-abiding citizens who develop a gambling problem become entangled in a web of crime and lies, which in numerous cases ultimately leads to imprisonment, huge debts, and a ruined professional reputation. A theoretical key term is “trust violator” (Cressey, 1973); embezzlement is made possible by having a position of trust. A useful theoretical model is the “fraud triangle,” which has emerged as a synthesis of criminological studies in this field (Dorminey, Fleming, Kranacher, & Riley, 2010). According to this model, embezzlement occurs when (1) there is opportunity, (2) there is perceived need or pressure, and (3) the embezzler rationalizes wrongdoings as excusable or even justified. The perceived need or pressure is typically hidden and unknown to others. It is often something shameful that requires a lot of money to be handled, such as having a gambling addiction and therefore constant economic troubles; it is an “un-sharable problem” (Cressey, 1973; Lesieur, 1984). A typical rationalization in gambling-driven employee embezzlement, at least in the initial phase, is that money is just “borrowed” from work for a short while and will be restored as soon as further gambling brings big wins. The problem gambler is caught in a vicious circle in which the position of trust, access to money, addiction to gambling, theft of money being rationalized as a “loan,” and seductive offers of commercial gambling companies may result in—as described in this article—criminal behaviour sustained over long periods and involving huge sums of money.

The policy implication of this study is that more efforts are needed to prevent the harmful consequences of problem gambling in the workplace (Binde, 2016b). These harms include not only the type of crime explored here, but also theft from colleagues, theft of goods from the workplace, and decreased productivity because

of preoccupation with gambling and the distress and ill health brought about by problem gambling. Although gambling-related embezzlement may be relatively uncommon compared with other harms caused by problem gambling, the consequences for the gambler, significant others, and the employer may be particularly severe and extended in time. According to the risk assessment formula, in which the need for prevention is determined by the frequency of a phenomenon multiplied by the severity of the harm that it causes, gambling-related embezzlement may be high in prevention priority.

## Conclusion

Private companies, public authorities, and non-profit organizations may lose huge sums of money through gambling-related embezzlement and similar economic crimes. Such crimes may continue for several years before being detected. The gambler and significant others may suffer severe harm over an extended period when problem gambling has led to criminal activities. Not only does the employer lose money, but the reputation of the business or organization is hurt and damage control efforts are often needed to address the organizational disarray and emotional reactions among colleagues when the crime is detected. There seem to be no branches of the economy that are free of this problem. The Swedish press reports, on average, about one detected case each month. However, the results of this study suggest that the prevalence is likely to be at least 10 times as high. More efforts should be allocated to preventing embezzlement and other gambling-related harms in the workplace.

## References

- Abbott, M., Binde, P., Clark, L., Hodgins, D., Korn, D., Pereira, A., ... Williams, R. (2015). *Conceptual framework of harmful gambling: An international collaboration*. (rev. ed.). Guelph, ON: Gambling Research Exchange Ontario (GREO).
- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.
- Bergh, C., & Kühlhorn, E. (1994). Social, psychological and physical consequences of pathological gambling in Sweden. *Journal of Gambling Studies*, 10, 275–285. doi:10.1007/BF02104968
- Binde, P. (2013). Why people gamble: A model with five motivational dimensions. *International Gambling Studies*, 13, 81–97. doi:10.1080/14459795.2012.712150
- Binde, P. (2014). Gambling in Sweden: The cultural and socio-political context. *Addiction*, 109, 193–198. doi:10.1111/add.12103

- Binde, P (2016a). Gambling-related embezzlement in the workplace: A qualitative study. *International Gambling Studies*, Advance online publication. doi:10.1080/14459795.2016.1214165
- Binde, P. (2016b). Preventing and responding to gambling-related harm and crime in the workplace. *Nordic Studies on Alcohol and Drugs*, 33, 247-266. doi: 10.1515/nsad-2016-0020
- Blaszczynski, A P., & McConaghy, N. (1994). Criminal offenses in Gamblers Anonymous and hospital treated pathological gamblers. *Journal of Gambling Studies*, 10, 99–127. doi:10.1007/BF02109935
- Brottsförebyggande rådet. (2002). *Ekobrott—utvecklingen av några centrala brottstyper* [Financial crime—The development of some principal types of crimes]. Stockholm, Sweden: Author.
- Brown, R. I F. (1987). Pathological gambling and associated patterns of crime: Comparisons with alcohol and other drug addictions. *Journal of Gambling Behavior*, 3, 98–114.
- Buvik, K. (2009). *Å gamble med jobben—pengespillproblemer i arbeidslivet* [To gamble with the jobs—Problem gambling in working life]. Oslo, Norway: AKAN.
- Cressey, D. R. (1973). *Other people's money: A study in the social psychology of embezzlement*. New York, NY: The Free Press.
- Crofts, P. (2003a). Problem gambling and property offences: An analysis of court files. *International Gambling Studies*, 3, 183–197. doi:10.1080/1356347032000142289
- Crofts, P. (2003b). White collar punters: Stealing from the boss to gamble. *Current Issues in Criminal Justice*, 15, 40–52.
- Dorminey, J W., Fleming, A S., Kranacher, M.-J., & Riley, R A., Jr. (2010). Beyond the fraud triangle: Enhancing deterrence of economic crimes. *The CPA Journal*, 80, 16–23.
- Edström, A. (1996). *Spelfällan: ett påverkansprogram i kriminalvården* [The gambling trap: An impact program in the penal system]. Norrköping, Sweden: Kriminalvårdsstyrelsen.
- Ferris, J., & Wynne, H. (2001). *The Canadian Problem Gambling Index: Final Report*. Ottawa, ON: Canadian Centre on Substance Abuse.
- Folino, J. O., & Abait, P. E. (2009). Pathological gambling and criminality. *Current Opinion in Psychiatry*, 22, 477–481.

Folkhälsomyndigheten. (2015). *Stöddlinjen årsrapport 2014* [Helpline yearly report 2014]. Östersund, Sweden: Author.

Jonsson, J., & Rönnerberg, S. (2009). Sweden. In G. Meyer, T. Hayer, & M. Griffiths (Eds), *Problem gambling in Europe: Challenges, prevention, and interventions* (pp. 299–315). New York, NY: Springer.

Kelly, P., & Hartley, C. A. (2010). Casino gambling and workplace fraud: A cautionary tale for managers. *Management Research Review*, *33*, 224–239. doi:10.1108/01409171011030381

Ladouceur, R., Boisvert, J.-M., Pépin, M., Loranger, M., & Sylvain, C. (1994). Social cost of pathological gambling. *Journal of Gambling Studies*, *10*, 399–409. doi:10.1007/BF02104905

Langham, E., Thorne, H., Browne, M., Donaldson, P., Rose, J., & Rockloff, M. (2016). Understanding gambling related harm: A proposed definition, conceptual framework, and taxonomy of harms. *BMC Public Health*, *16*(80). doi:10.1186/s12889-016-2747-0

Lesieur, H. R. (1984). *The chase: Career of the compulsive gambler* (2nd ed.). Rochester, NY: Schenkman.

Liljewalch, J. (2003). Rapport från fältet: Hur förebygger företagen brott? [Report from the field: How do companies prevent crime?]. In L. Emanuelsson Korsell (Ed.), *BRÅ-rapport 2003:10—Förebyggande metoder mot ekobrott: En antologi* (pp. 43–59). Stockholm, Sweden: Brottsförebyggande rådet.

Lind, K., Käätäinen, J., & Kuoppamäki, S.-M. (2015). From problem gambling to crime? Findings from the Finnish National Police Information System. *Journal of Gambling Issues*, *30*, 98–123. doi:10.4309/jgi.2015.30.10

Lindstedt, N., & Nilsson, L. (2015). Med livet som insats [With life at stake]. *Vision*, *5*, 28–34. Retrieved from <https://vision.se/Yrken/Chef/chefen-i-fokus/arkiv/2015/augusti/med-livet-som-insats/> Archived at WebCite®: <http://www.webcitation.org/6kdwXYCdy>

Marquet International. (2013). *The 2012 Marquet report on embezzlement*. Marquet International, Ltd. Retrieved from [http://www.marquetinternational.com/register.php?target=trackpdfs/the\\_2012\\_marquet\\_report\\_on\\_embezzlement.pdf](http://www.marquetinternational.com/register.php?target=trackpdfs/the_2012_marquet_report_on_embezzlement.pdf)

Meyer, G., & Fabian, T. (1996). Pathological gambling and criminal culpability: An analysis of forensic evaluations presented to German penal courts. *Journal of Gambling Studies*, *12*, 33–47. doi:10.1007/BF01533188



Meyer, G., & Stadler, M. A. (1999). Criminal behavior associated with pathological gambling. *Journal of Gambling Studies*, *15*, 29–43. doi:10.1023/A:1023015028901

Peterson, V. W. (1947). Why honest people steal. *Journal of Criminal Law and Criminology*, *38*, 94–103.

Petry, N. M., Blanco, C., Auriacombe, M., Borges, G., Bucholz, K., Crowley, T. J., ... O'Brien, C. (2014). An overview of and rationale for changes proposed for pathological gambling in DSM-5. *Journal of Gambling Studies*, *30*, 493–502. doi:10.1007/s10899-013-9370-0

Petry, N. M., Blanco, C., Stinchfield, R., & Volberg, R. (2013). An empirical evaluation of proposed changes for gambling diagnosis in the DSM-5. *Addiction*, *108*, 575–581. doi:10.1111/j.1360-0443.2012.04087.x

Productivity Commission. (1999). *Australia's gambling industries* (Report No. 10). Canberra, Australia: AusInfo.

Productivity Commission. (2010). *Gambling* (Report No. 50). Canberra, Australia: Author.

Public Health Agency of Sweden. (2016). *Gambling and gambling problems in Sweden 2008–2010: Swedish Longitudinal Gambling Study, Swelogs—Findings from wave one and wave two*. Östersund, Sweden: Author.

Ramamoorti, S. (2008). The psychology and sociology of fraud: Integrating the behavioral sciences component into fraud and forensic accounting curricula. *Issues in Accounting Education*, *23*, 521–533. doi:10.2308/iace.2008.23.4.521

Ross, G. (1987). *Stung: The incredible obsession of Brian Molony*. Toronto, ON: Stoddart.

Sakurai, Y., & Smith, R. G. (2003). Gambling as a motivation for the commission of financial crime. *Trends & Issues in Crime and Criminal Justice* (No. 256). Retrieved from [http://www.aic.gov.au/media\\_library/publications/tandi\\_pdf/tandi256.pdf](http://www.aic.gov.au/media_library/publications/tandi_pdf/tandi256.pdf)

Schwer, R. K., Thompson, W. N., & Nakamuro, D. (2003). *Beyond the limits of recreation: Social costs of gambling in Southern Nevada*. 2003 Annual Meeting of the Far West and American Popular Culture Association. Las Vegas: University of Nevada.

Smith, G., & Simpson, R. (2014). Gambling addiction defence on trial: Canadian expert witness perspectives. *International Journal of Criminology and Sociology*, *3*, 319–326. doi:10.6000/1929-4409.2014.03.27

Smith, R. G. (2003). *Serious fraud in Australia and New Zealand*. Canberra, Australia: Australian Institute of Criminology & PricewaterhouseCoopers.

Socialdepartementet. (2015). *DS 2015:48 Förebyggande och behandling av spelmissbruk* [DS 2015:48 Prevention and treatment of problem gambling]. Stockholm, Sweden: Author.

Stinchfield, R., McCready, J., Turner, N. E., Jimenez-Murcia, S., Petry, N. M., Grant, J., ... Winters, K. C. (2016). Reliability, validity, and classification accuracy of the DSM-5 diagnostic criteria for Gambling Disorder and comparison to DSM-IV. *Journal of Gambling Studies*, 32, 905–922. doi:10.1007/s10899-015-9573-7

Strong, D. R., & Kahler, C. W. (2007). Evaluation of the continuum of gambling problems using the DSM-IV. *Addiction*, 102, 713–721. doi:10.1111/j.1360-0443.2007.01789.x

Sutherland, E. H. (1949). *White Collar Crime*. New York: Dryden Press.

Temcheff, C., Paskus, T. S., Potenza, M. N., & Derevensky, J. L. (2016). Which diagnostic criteria are most useful in discriminating between social gamblers and individuals with gambling problems? An examination of DSM-IV and DSM-5 criteria. *Journal of Gambling Studies*, 32, 957–968. doi:10.1007/s10899-015-9591-5

Thompson, W. N., Gazel, R., & Rickman, D. (1996). The social costs of gambling in Wisconsin. *Wisconsin Policy Research Institute Report*, 9(6). Retrieved from [http://www.casinowatch.org/costs/wisconsin\\_report.html](http://www.casinowatch.org/costs/wisconsin_report.html)

Turner, N. E., Preston, D. L., McAvoy, S., & Gillam, L. (2013). Problem gambling inside and out: The assessment of community and institutional problem gambling in the Canadian correctional system. *Journal of Gambling Studies*, 29, 435–451. doi:10.1007/s10899-012-9321-1

Turner, N. E., Preston, D. L., Saunders, C., McAvoy, S., & Jain, U. (2009). The relationship of problem gambling to criminal behavior in a sample of Canadian male federal offenders. *Journal of Gambling Studies*, 25, 153–169. doi:10.1007/s10899-009-9124-1

Turner, N. E., Stinchfield, R., McCready, J., McAvoy, S., & Ferentzy, P. (2016). Endorsement of criminal behavior amongst offenders: Implications for DSM-5 gambling disorder. *Journal of Gambling Studies*, 32, 35–45. doi:10.1007/s10899-015-9540-3

Warfield, B. (2011). *Gambling motivated fraud in Australia 2008–2010*. Sydney, Australia: Warfield & Associates.

Warfield, B. (2013). *Employee fraud in Australian financial institutions*. Sydney, Australia: Warfield & Associates.

Zietz, D. (1981). *Women who embezzle or defraud: A study of convicted felons*. New York, NY: Praeger.

Zorland, J., Mooss, A., & Perkins, A. (2008). *Gambling and offending: An examination of the literature*. Atlanta: Georgia State University.

Zurhold, H., Verthein, U., & Kalke, J. (2014). Prevalence of problem gambling among the prison population in Hamburg, Germany. *Journal of Gambling Studies*, 30, 309–319. doi:10.1007/s10899-013-9361-1

### Endnotes

<sup>1</sup>No statistics are available on the yearly number of problem gamblers in Sweden who begin therapy or start to attend mutual support meetings. According to personal communication with representatives of mutual support societies in Sweden, which are connected through a national organization, about 440 gamblers sought help in 2014 (not counting those who at the same time underwent conventional therapy). The national network for problem gambling therapists, who work on behalf of municipalities and counties, reported that in 2013, approximately 291 clients began therapy (Socialdepartementet, 2015, p. 70). However, numerous therapists and counsellors in municipalities and counties are not members of this network, but nevertheless receive clients with gambling problems. There are also therapists in private practice who receive problem gambling clients. From this information, it is reasonable to assume that at least 1,000 problem gamblers each year begin therapy or start to attend mutual support meetings. This estimate also seems reasonable when considering that 1,518 problem gamblers contacted the national helpline in 2013 via phone, chat or e-mail (Folkhälsomyndigheten, 2015). Not all of these gamblers began therapy or started to attend mutual support meetings (and about 120 were counted twice because they called multiple times), but far from all of those who begin therapy or mutual support have called the helpline. Another indication that at least 1,000 individuals is a reasonable lowest estimate is that, according to the 2008–2009 Swedish population study of gambling and problem gambling (Public Health Agency of Sweden, 2016), approximately 2,800 individuals had sought help for gambling problems once and 7,600 had sought help several times. The time frame was “ever,” but as specific help for problem gambling has not existed in Sweden for much more than a decade, it is reasonable to assume that most of the help seeking occurred in the past 10 years, that is, at least about 1,000 individuals per year. According to the same population study, there were approximately 23,700 individuals with a gambling problem, defined as scoring at least 8 points on the Problem Gambling Severity Index (Ferris & Wynne, 2001). If 5% of these problem gamblers seek help in the following year, that would amount to 1,185 individuals; international estimates, using various time frames and definitions of problem gambling, suggest help-seeking rates of between 6% and 17% (Productivity Commission, 2010, p. 7.3).

<sup>2</sup>Tables 2 and 3 show the results from this study in comparison with results from two other studies (Marquet International, 2013; Warfield, 2011) on the prevalence of publicly known cases and newspaper reports of gambling-related employee embezzlement. The comparison should be seen as approximate because of differences in data collection, definitions of the crimes included, and other factors that influence the results. In summary, the prevalence observed in this study is the same as that suggested by the American study (Marquet International, 2013) and similar to (about 35% lower) the results of the Australian study (Warfield, 2011). It should be kept in mind that these figures do not include undetected cases and cases that have not come to public attention or been brought to court.

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