

## Journal Information

Journal ID (publisher-id): jgi

ISSN: 1910-7595

Publisher: Centre for Addiction and Mental Health

## Article Information

© 1999-2003 The Centre for Addiction and Mental Health

Received Day: 15 Month: January Year: 2002

Accepted Day: 8 Month: April Year: 2002

Publication date: May 2003

Publisher Id: jgi.2003.8.6

DOI: 10.4309/jgi.2003.8.6

---

## Fruit machine addiction in an adolescent female: A case study

**Mark Griffiths, PhD**Affiliation: Psychology Division, Nottingham Trent University, Nottingham, United Kingdom, E-mail: [mark.griffiths@ntu.ac.uk](mailto:mark.griffiths@ntu.ac.uk)

[This article prints out to about 12 pages.]

Correspondence: For correspondence: Mark Griffiths, PhD, Department of Social Sciences, Nottingham Trent University, Nottingham, United Kingdom, Telephone: 0115 9418418 ext. 5502, Fax: 0115 9486826, E-mail: [mark.griffiths@ntu.ac.uk](mailto:mark.griffiths@ntu.ac.uk)

*Mark Griffiths, PhD, is a professor of gambling studies at Nottingham Trent University, and is internationally known for his research on gambling and gaming addictions. In 1994, he was the first recipient of the John Rosecrance Research Prize for "outstanding scholarly contributions to the field of gambling research." He has published over 110 refereed research papers, two books, numerous book chapters and over 250 other articles. His current interests are technological addictions, especially computer games and the Internet.*

---

Gambling is perceived as an "adult" activity primarily because of the legal restrictions placed on it. However, fruit machine gambling (a kind of slot machine playing) is one activity that is legally available to adolescents in the United Kingdom. Adolescent fruit machine playing is a widespread phenomenon, yet we still know so little about it in comparison with other potentially addictive behaviours. In the most recent U.K. study by [Fisher and Balding \(1998\)](#), 75% per cent of close to 10,000 adolescent participants stated that fruit machines were their favourite form of gambling.

A more thorough examination of the literature ([Griffiths, 1995](#); [Fisher, 1992](#); [Fisher & Balding, 1998](#)) indicates that in the U.K.:

- At least two-thirds of adolescents play fruit machines at some point during adolescence.

- One-third of adolescents have played fruit machines in the last month.
- 10% — 20% of adolescents are regular fruit machine players (playing at least once a week).
- Up to 6% of adolescents are probable pathological gamblers and/or have severe gambling-related difficulties.

Published studies report that males play fruit machines more often than females and that as fruit machine playing becomes more regular it is more likely to be a predominantly male activity. Researchers have identified few female adolescent fruit machine addicts.

Why do adolescents play fruit machines? There is no easy answer. However, research suggests that irregular (“social”) gamblers play for different reasons than excessive (“pathological”) gamblers ([Griffiths, 1995](#)). Social gamblers usually play for fun and entertainment, their friends or parents do (i.e., it is a social activity), for the chance of winning money, because it's challenging and easy to access or for the excitement (the “buzz”) and because there is little else to do. It appears that pathological gamblers play to change the way they feel, for mood modification and to escape reality. As noted, young males seem to be particularly susceptible to fruit machine addiction. Using an adapted version of the American Psychiatric Association criteria ([Fisher, 1993](#); [Griffiths, 1995](#)), with up to 6% of adolescents in the U.K. experiencing problems with their fruit machine playing at any given time. Not everyone who plays fruit machines will develop an addiction, just as not everyone who drinks alcohol will become an alcoholic. What it does mean is that given a cluster of factors (genetic and/or biological predisposition, social upbringing, psychological constitution, situational and structural characteristics) a small proportion of people will unfortunately experience severe problems.

Like other potentially addictive behaviours, an addiction to playing fruit machines causes negative behaviours such as truancy ([Griffiths, 1990a, 1990b, 1995](#); [Fisher & Balding, 1998](#)), stealing money to play ([Griffiths, 1990a, 1993](#); [Yeoman & Griffiths, 1996](#); [Fisher & Balding, 1998](#)), having trouble with teachers and/or parents because of machine playing ([Griffiths, 1990a, 1993, 1995](#)), borrowing or using lunch money to play ([Griffiths, 1990a, 1995](#); [Fisher & Balding, 1998](#)), doing poorly at school ([Griffiths, 1990a, 1995](#)), and in some cases, aggressive behaviours ([Griffiths, 1990a, 1995](#)). These behaviours are similar to other types of adolescent problem gambling. Furthermore, adolescents addicted to fruit machine playing also display bona fide signs of addiction including withdrawal effects, tolerance, salience, mood modification, conflict and relapse.

As already noted, researchers have identified few adolescent females addicted to playing fruit machines. [Fisher \(1993\)](#) and [Griffiths \(1991\)](#), through their observational studies, have published the only findings relating to females who

play fruit machines. Fisher reports that some female teenagers have no playing skills and little interest in acquiring them. They also gamble on fruit machines primarily to gain access to the arcade venue where they can socialize with friends (Fisher calls them “rent-a-spacers”); they prefer the role of spectators. [Griffiths \(1991\)](#) observed that arcades are social meeting places dominated by male activities and that female adolescents often play a “cheerleading” role in these activities. With so little known about excessive fruit-machine playing by female adolescents, this study reports the rare case of a female teenager who has a fruit-machine addiction.

---

## Method

The participant — an adolescent problem fruit-machine gambler — contacted the author after hearing a lecture he had given on problem gambling at the college where she studied. During a nine-month period, the author interviewed the participant three times formally and stayed in regular contact with her on an informal basis. The DSM-IV criteria for pathological gambling ([American Psychiatric Association, 1994](#)) were utilised, confirming that the participant was a former pathological gambler. At the time of the study, the participant was 22 years old.

This account tells the participant's story of how she acquired, developed and maintained her fruit-machine gambling problem. The account is presented chronologically; however, the original interviews were unstructured and allowed the participant to talk freely about whatever came to mind. A critical interpretation of the account follows in the discussion, although some initial observations are made where appropriate. Since the account is highly personal, the participant has been given the pseudonym “Jo.”

---

## Results: The case study

### Background

Jo was brought up as an only child in a seaside town in the South West of England. She described her parents as “comfortable, middle class and loving” but added that they made her follow reasonably strict rules. Her father was an insurance salesman and her mother a schoolteacher. She went to a mixed school, boys and girls, and up until the age of 13, received good report cards, performing in the top 10% of her class. She was also very good in sports, an active member of the school's athletic club, and described herself as “physically stronger” than most of her peers. Jo claims she couldn't really relate to the other girls in her school and often got into playground fights with them. During her early adolescence, she made a few good friends, mostly with boys her own age or a little older. She described

herself as a “tomboy.” When she was nearly 15, she had her “first serious boyfriend” whom she described as the “leader of the gang.”

She left school when she was 16 and got an office job working as an administrative assistant. After recovering from her gambling problem, she is now back at school completing a vocational paramedical course.

### **Acquisition of fruit-machine gambling**

Jo started playing fruit machines at a young age because they were easy to access in her town, like “being part of the wallpaper.” To some extent, her parents encouraged her to gamble. Like a lot of “seaside parents,” they often took Jo to the amusement arcades as a child for a weekend treat. Jo's parents, like many, didn't see anything wrong with this type of gambling — “it was harmless fun and didn't cost much.” However, these early experiences coupled with fruit-machine playing in her peer group were instrumental factors in Jo's acquisition of fruit-machine playing. The seaside town where Jo lived was a popular tourist attraction. It had four to five arcades, providing a popular meeting place for her friends and easy access to the machines. She was part of a gang that hung around the arcades for one of the few activities they could engage in. At 13, she regularly just watched her male friends play fruit machines and video games. However, within a year, she was playing fruit machines just as much as they were. “I'd go down to the arcade almost every day after school and be there most of the day during weekends. It was somewhere for us all to meet and have fun.”

Jo felt “safe and protected” at the arcade. She liked it that everyone who worked there knew who she was — she was a “somebody” rather than a “nobody.” In essence, being at the arcade boosted Jo's self-esteem.

### **Motivations to gamble**

Jo gave a number of insightful reasons why she played fruit machines. Skill did not appear to be a motivating factor for continued play. She played to win money, so she could continue to play rather than fuel fantasies of winning a lot of money. Jo thought that playing fruit machines didn't require much skill; however, most of Jo's male friends claimed that fruit-machine playing required a lot of skill to be good at it. However, Jo always believed that to “win big” at fruit machines, unlike video games, you needed a lot of luck. Knowing how to use fruit machines didn't make her feel particularly skilful except when novices played next to her. Women older than her playing fruit machines wanted to socialize with her but not with boys her age — this made Jo feel wanted and needed.

When Jo was between 15 and 17, her fruit-machine playing became all-encompassing:

*There was a period in my life between the ages of 15 and 17 where the machines became the most important thing in my life. I didn't worry about money. I just believed I would win it back or that money would come from somewhere, because it always had. I was forever chasing my losses.*

*I would always tell myself that after a bad loss, the arcade was only “borrowing” my money and that they would have to “pay it back” next time I was in there. Of course, that rarely happened, but once I was playing again, money worries and losses went out of the window. Gambling became my primary means of escape. On the positive side, at least it helped me to give up smoking and drinking. I simply couldn't afford to buy nicotine or alcohol — or anything else for that matter. I never believed that gambling would make me rich — I just thought it would help me clear my debts.*

*I used to love the anticipation of going to play on the machines. The feeling after just being paid was almost intoxicating. Knowing I could afford to gamble because I had the cash in my purse was a wonderful feeling. Losing it all wasn't though. I remember blowing all my wages in a few hours one Friday night. I got really upset and depressed. It's like drugs, you tell yourself “never again” but deep down you know that as soon as the next pay cheque comes in, you'll be down at the arcade.*

### **Development of problem gambling**

Jo didn't acknowledge that she had a problem — even when she was going to the arcade alone and using all of her disposable income to play the fruit machines. However, in retrospect, she realized a problem was developing.

*Over time I saw less and less of my parents. Straight after school, I would go to one of two arcades and play on the [fruit] machines for half an hour or so. Originally, I would go to the arcade to meet up with my friends. As time went on, I didn't care if they were there or not. I used to spend hours in there and only leave if I lost all my money, or it was time for the arcade to close. I simply wanted to play the machines. I became totally obsessed with them to the point where I couldn't get to sleep because I would be going over moves in my head. Looking back, I cannot believe I spent so much mental energy thinking about gambling.*

*... I used to spend every penny I had on the machines. It was a good job I wasn't into clothes like the other girls at school. I couldn't have afforded to buy anything, as I lost everything I had in the long run. I used to wear the same pair of jeans for months. I don't even think I washed them.*

*... My parents are lovely people but at the height of my playing, I didn't care about anyone — not even my boyfriend. We had loads of arguments about my gambling. He said it was OK for him to play on them but not for me. He called me an*

*“embarrassment to be with.” He was quite well off, which is one of the reasons I went out with him. I would always be borrowing money off him. I would tell him I needed to get cigarettes or something, but all of it went into the machines. He eventually realized my gambling was a problem. Initially he tried to help but just got pissed off and left me. At the time, I didn't give a shit as the machines were more important than anyone living.*

### **Hiding the problem**

When Jo was 15 years old, her mother received a phone call from the headmaster at Jo's school explaining that Jo had missed a lot of school in the last three months, had stopped attending athletics practice and might be having some problems in her life. When Jo was confronted, she admitted that she wasn't attending school. But the reason she gave was that all the girls in her class hated her. To some extent this was true (she didn't get on with any of the girls at her school) but it wasn't the reason she was truanting. Instead of going to school, she was spending her time in the local arcades. For a few weeks she tried to stop gambling — now that her parents knew she had a problem, she thought it would be the ideal time to give it up. However, after 17 days without gambling, her boyfriend split up with her and she relapsed and started gambling again. She played for almost two years after that.

Jo's parents were understanding and looked for ways to help their daughter. They considered switching Jo's classes so she would be with new classmates and changing schools. Jo simply said she would try to integrate more. Even after Jo received a less than favourable year-end report card, her parents viewed her situation sympathetically surmising that her decline in academic performance was caused by circumstances beyond her control. Jo's parents never suspected that her erratic behaviour was linked to anything other than problems with adolescent socializing. Jo successfully managed to keep her secret for another two years before everything came out into the open.

As an only child it was difficult for her parents to know whether their experience was typical. They hardly saw Jo. At 16, Jo left school and then moved out of home. Her parents were upset but there was little they could do about it. When Jo left home, she assumed that all her problems would disappear; however, she got into more trouble. She was unable to make ends meet and ended up living hand to mouth. She began to steal from friends, people at work and from anyone she met. Twice she met men, went back to their houses and then stole their money and/or valuables.

*At the time it seemed the only answer. I was in debt, running up my overdraft. Having just started a job with a reasonable salary for someone of my age, I opened up a few bank accounts and abused them all. I couldn't believe how easy it was for*

*me to get credit.*

During this period of nearly two years, Jo became more and more withdrawn, lost her friends and resorted to stealing from her place of work. Eventually she was sacked for taking the petty cash. Her employers were unaware of her gambling problem; they assumed she wanted more money to supplement her modest wages. Although she lost her job, the company did not press charges.

### **Confronting the problems and recovery**

The first major turning point for Jo was being fired from her first job for theft. She had nowhere else to go but back home. Although Jo's parents were surprised that fruit-machine playing was at the heart of their daughter's problems, they were tremendously supportive. Jo claimed her mother didn't believe her at first. Her parents wondered how someone could become addicted to a machine. Jo thought it would have been easier for her mother to accept that she had a drug or alcohol problem, rather than a gambling problem.

The cessation of her gambling began when Jo, with her parents' help, got another job in a remote village in Cornwall (South West England). There was no arcade, no fruit machines in the local pub and no fruit machines within a four-mile radius. She did not drive a car, and it was too far to walk to the nearest town. Essentially, the lack of access to fruit machines forced her to stop playing. She still had cravings but she couldn't do anything about them. She also reported a number of serious withdrawal symptoms. At work she was short-tempered, irritable with colleagues and constantly moody. She had trouble sleeping, occasionally experienced stomach cramps and felt nauseous.

When Jo lived on her own, there was little overt family distress (although she claims her parents worried about her living on her own). Even when her parents discovered she was skipping school, they were supportive rather than punitive. It wasn't until she was sacked from her job and came home penniless and deep in debt did they realize how many problems Jo had. Even then, they stuck by her. They realized she wanted to live independently, so they got her an apartment about half an hour away. As Jo says, it was "near enough for (her parents) to come over in an emergency but far enough away that they didn't pop over all the time."

Jo eventually joined a local Gamblers Anonymous (GA) group, which her parents drove her to every week. She attended a few sessions but stopped because she was the only female, the only fruit-machine player and also the youngest. Despite the opportunity to share her experiences with eleven or twelve people in a similar situation, she felt psychologically isolated. Being able to talk about her problems with people she trusted (i.e., her parents) was a great help. Because she wanted to stop gambling and had no access to fruit machines, Jo managed to curtail her

gambling. She claims she “wasted four years of her adolescence” because of fruit-machine playing — and she doesn't want to waste any more of her life. However, there is no certainty that Jo is “cured” — she feels a number of incidents could trigger her fruit-machine playing again, like being rejected by someone close to her. Talking to people has been what Jo calls her “salvation.” She always thought that fruit-machine playing couldn't be a problem; therefore, she found it hard to believe that people accepted it as an “addiction.” Because people accepted her addiction as something akin to alcoholism or drug addiction she was able to recover.

---

## Discussion

As in most case studies, it is hard to make generalizations about people affected by similar phenomena. However, this study highlights a number of findings that have yet to be reported in the general literature about adolescent gambling. Similar to previous survey research, this case study confirmed that gambling acquisition was the result of sociological factors, rather than psychological or biological factors ([Griffiths, 1995](#)). More specifically, these factors included widespread legal accessibility of fruit machines and parental encouragement and acceptance of fruit-machine gambling. Fruit machine-playing is also a major peer-group activity. Another acquisitional factor is what [Griffiths \(1995\)](#) described as “choice limitation” (i.e., there is not much else for this particular age group to do). All these factors appear to play a part in behaviour acquisition. It's highly unusual for a young female to be addicted to fruit-machine playing, and as far as the author knows, there no accounts of female fruit machine addiction in the gambling literature. The participant in this study described herself as a “tomboy” — her male friends may have felt more comfortable with her because of this.

As with previous male case studies of fruit-machine addiction ([Griffiths, 1995](#)), the participant's gambling pathology only seemed to affect a few people. Her boyfriend and, to some extent, her parents were directly affected by her problematic gambling behaviour. The number of people affected is significantly less than the commonly quoted figure of 10 to 15 people cited by [Lesieur and Custer \(1984\)](#).

The development and maintenance of the participant's gambling habits appear to be because of psychological and physiological factors. Feelings of self-worth and a way of escape appear to be the primary motivations for continuing to gamble. Winning money allowed the participant to keep gambling, rather than providing financial stability — playing with money rather than for it. One interesting point to note was that at the beginning of her gambling career, the participant conformed to the female arcade stereotype as “cheerleader” ([Griffiths, 1991](#)) and “rent-a-spacer” ([Fisher, 1993](#)). However, within a short period, the participant's behaviour was similar to males who gambled excessively. This implies that further observational



research needs to take account of how people can change over time rather than being in the fixed and static category of player.

In previous studies, gamblers report skill as being one of the possible critical factors in fruit-machine gambling ([Griffiths, 1994](#)). However, this case study is markedly different. The participant believed that to play fruit machines, you didn't need to be particularly skilful. She also had a balanced view of chance and winning. Because males are generally more competitive, they may define "skill" differently than females. This is one area where further research could prove useful. The participant's motivation to gamble appeared to come from a number of desires. In the arcade, she felt that she was a "somebody" rather than a "nobody" because everyone knew her. Women older than her playing fruit machines also sought her views. Her popularity at the arcade seemed to raise her self-esteem. The arcade and machines also provided a means of escape in her life. This is a common feature of most addictions and appears to be no different in this case.

From this author's research experience, the account presented here is fairly typical of people addicted to fruit-machine playing. This individual began playing fruit machines socially. Steadily, she gambled more and more over time, spent every last penny, borrowed money and then finally stole money to fund her gambling habit. Criminal proceedings may have proceeded against her but fortunately for her, she was only punished by losing her job. The one major difference between this account and other accounts is that this participant is female. By examining the participant's gambling behaviour in detail, there is little doubt that she was addicted to playing fruit machines. In addition to fulfilling the DSM-IV classification as a pathological gambler, the participant displayed the classical features of addiction:

- **Salience:** The participant became totally preoccupied with gambling and thought about it all the time. She also claimed she had become "obsessed" with fruit machines and that they were the most important and all encompassing thing in her life.
- **Tolerance:** Over time the participant went from watching others gamble to gambling for short periods to gambling all the time.
- **Mood modification:** The participant used gambling as a means of escape and to forget about everything. She also found some of the anticipatory feelings "intoxicating."
- **Withdrawal:** The participant experienced both psychological and physiological effects when prevented from gambling. These included moodiness, irritability, nausea, stomach cramps and insomnia.
- **Conflict:** The participant experienced a lot of conflict in her life because of gambling. It happened at an interpersonal level with her boyfriend. Her behaviours were adversely affected — she didn't go to school or have many friends. Gambling caused intra-psychic conflict.

- Relapse: After a period of non-gambling a key personal relationship disintegrated and the participant returned to full-time gambling.

In addition, she constantly chased her losses and exhibited other classic signs of adolescent problematic gambling behaviours, such as having cravings, borrowing and stealing money, truanting from school, etc.

The participant eventually curtailed her gambling behaviours without formal treatment, although she did attend GA for a handful of sessions. However, she perceived GA as a negative experience particularly because of the psychological isolation she felt. Not only was she the only fruit-machine player in the self-help group, but she was the only female and the youngest. All these factors led to her eventual dropout, and raise important issues for treatment. Other vulnerable individuals may require help but drop out of programs such as GA because they cannot identify with people in the particular self-help group. The good thing in this case was that despite the lack of treatment, the participant managed to overcome her problems. As with previous case studies ([Griffiths, 1995](#)), one of the most salient themes in preventing bad gambling behaviours is family communication and support.

The major limitation of a study such as this is that it relies totally on retrospective self-report. Not only does the author have to take the participant's account as true, but the report is also subject to the fallibility of human memory. Because this study is based on one person's account, generalizations about the findings are limited. However, further research made with larger samples may help confirm these observations and speculations.

---

## References

- American Psychiatric Association ( 1994). *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.). Washington, D.C.: Author
- Fisher, S.E.. ( 1992). Measuring pathological gambling in children: The case of fruit machines in the U.K. *Journal of Gambling Studies*, 8, 263-285.
- Fisher, S.. ( 1993). The pull of the fruit machine: A sociological typology of young players. *Sociological Review*, 41, 446-474.
- Fisher, S.E.. Balding, J.. ( 1998). *Gambling and Problem Gambling among Young People in England and Wales*. London: Office of the National Lottery.
- Griffiths, M.D.. ( 1990a). The acquisition, development and maintenance of fruit machine gambling in adolescence. *Journal of Gambling Studies*, 6, 193-204.
- Griffiths, M.D.. ( 1990b). Addiction to fruit machines: A preliminary study among males. *Journal of Gambling Studies*, 6, 113-126.
- Griffiths, M.D.. ( 1991). The observational analysis of adolescent gambling in U.K. amusement arcades. *Journal of Community and Applied Social Psychology*, 1, 309-320.
- Griffiths, M.D.. ( 1993). Factors in problem adolescent fruit machine gambling: Results of a small postal survey. *Journal of Gambling Studies*, 9, 31-45.

Griffiths, M.D.. ( 1994). The role of cognitive bias and skill in fruit machine gambling. *British Journal of Psychology*, 85, 351-369.

Griffiths, M.D.. ( 1995). *Adolescent Gambling*. London: Routledge.

Lesieur, H.R.. Custer, R.L.. ( 1984). Pathological gambling: Roots, phases and treatment. *Annals of the American Academy of Political and Social Sciences*, 474, 146-156.

Yeoman, T.. Griffiths, M.D.. ( 1996). Adolescent machine gambling and crime. *Journal of Adolescence*, 19, 183-188.

---

Article Categories:

- Clinic