Identifying problem and compulsive gamblers

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abstract

OBJECTIVE To present a meta-analysis of current research on the prevalence, identification, and treatment of problem and compulsive gamblers.

QUALITY OF EVIDENCE Problem and compulsive gambling was not a socio-scientific concern until the last two decades. Hence research on this topic is limited. The summary and analysis for this paper relied on computer searches of journal and news abstracts in addition to direct contact with organizations addressing the identification and treatment of compulsive gamblers.

MAIN MESSAGE An estimated 5% of those who gamble run into problems. About 1% of those who gamble are predicted to experience serious problems. Successful treatment of problem and compulsive gambling continues to be a challenge. Although cognitive therapy has been the favoured approach, a combination of several therapeutic approaches is advocated.

CONCLUSIONS Problem and compulsive gambling can present a real health threat. As with other addictions, treatment strategies continue to be a baffling social problem. Aware and informed physicians can have a pivotal role in the difficult process of identifying, acknowledging, and remediating problem and compulsive gambling.

This article has been peer reviewed.

Cet article a fait l'objet d'une évaluation externe.

he stress of being, or living with, a compulsive gambler can pose a serious health threat. As with other addictions, excessive gambling can lead to emotional, social, and financial problems.

Simply stated, gambling becomes a problem when someone spends too much time, too much money, or too much attention at the bingo hall, in the casino, on lottery tickets, or on any other form of wagering. The life of the gambler, and the lives of those with whom the gambler interacts, can be seriously harmed by this singular obsession with gambling through the inherent financial recklessness, severe depression following economic losses, and perhaps even suicide.

Problem gambling—and certainly the more severe “compulsive” or, as defined by the medical profession, “pathological” gambling—can have a devastating effect on individuals and their acquaintances. A gambling addiction is difficult to detect. Problem or compulsive gambling has been described as a hidden illness. It is difficult to tell whether or not someone has been gambling. Unlike alcohol and alcoholism, you cannot smell it on his or her breath. Further, social convention usually encourages extreme privacy about income and spending. This attitude of secrecy toward money can accord problem gamblers prolonged periods of deception. Therefore, when someone is finally diagnosed as having a gambling problem, their finances, emotions, and relationships are often already in great disarray.

How can we tell when gambling is causing problems in peoples’ lives? When does participation in gambling become a pathological or addictive behaviour? How many people suffer from this type of dysfunctional behaviour, and what types of remedies have been found to be effective? Answers to these questions are of special concern to anyone working in the helping or medical professions.

It is important to know that gambling can become a problem. Social and scientific research provides us with compelling information about the extent to which problem gambling exists in Canada. Second, to make a timely diagnosis, it is useful to understand the basic characteristics of problem and compulsive gambling. Finally, familiarity with therapeutic options can facilitate recommendation of effective recovery routes once problem or compulsive gambling is suspected or identified.

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Quality of evidence
Canadian social and scientific research on problem gambling is severely limited. This addiction has only recently gained recognition in Canada. The American Psychiatric Association first defined compulsive (or pathological) gambling as a disorder of impulse control in 1980. A report from the First National Symposium on Lotteries & Gambling, held by the Public Policy Program of the School of Criminology at Simon Fraser University in 1988, marks the earliest substantive compilation of research on gambling in Canada, Gambling in Canada: Golden Goose or Trojan Horse?

This dearth of research on problem gambling necessitated a diversity of research approaches. In addition to the usual computer searches of journal abstracts, research for this article was conducted by examining a comprehensive collection of prevalence studies, comparing a variety of primary data, and contrasting a summary of therapeutic approaches using a respected epistemological tool: the model of transformational stages by Prochaska and DiClemente.

Information on prevalence rates was located using Canadian News Abstracts and then directly contacting researchers for copies of their reports. The strength of the evidence from the prevalence studies was generated by relying on cumulative evidence from several different studies. Evidence for the traits of problem and compulsive gamblers relied on the credibility of sources. In turn, the validity of the model for transformation stages by Prochaska and DiClemente was anchored to the professional community’s positive reception of this model.

The Journal of Gambling Studies (formerly the Journal of Gambling Behavior), published in the United States by the National Council on Problem Gambling and the Institute for the Study of Gambling and Commercial Gaming (University of Nevada at Reno), has only 11 volumes. Bibliographies in this journal were scanned volume by volume for articles pertinent to this study.

Prevalence: the proverbial 1%
With the current expansion of gambling opportunities, such as video lottery terminals (VLTs) and casinos, Canadians have become increasingly concerned with the social effect of these changes. Video lottery terminals have certainly sparked the sharpest public concern about the proliferation of legalized gambling. These computerized gambling toys, which electronically simulate slot machines, popular poker card games, or arcade video games, were first installed in
Canada's Maritime Provinces in 1991. The VLTs were often placed in corner stores or bars. This ease of access likely fostered public reaction against this specific form of gambling.

Since 1990, several studies on problem gambling have been conducted in Quebec, Ontario, and Alberta. Table 1 lists the researchers, the year, and the geographic location, and summarizes findings on the prevalence of problem and compulsive gambling in Canada. In almost all these studies, “problem” (and, when gambling is defined as a more serious issue, “compulsive”) gamblers were identified using the South Oaks Gambling Screen (SOGS).

The SOGS was developed as a screening tool by Lesieur and Blume in the late 1980s. The questionnaire consists of 16 items with various subsections. The SOGS begins by asking respondents how frequently they engaged in a variety of gambling activities during the past 12 months and during their lifetime. The second set of questions explores the amounts of money gambled on “any one day.” As well, respondents are asked whether their parents or acquaintances had gambling problems, if they had ever tried to stop gambling, whether they had ever lied about gambling, and other aspects of their gambling activities.

Responses to the questions are scored as positive or negative and then totaled. For example, if respondents have parents who have or had a gambling problem, that answer is counted as a “negative” or “problematic” score. Negative responses to one to four questions indicate “some problem” with gambling and five or more negative responses indicate a “probable pathologic” or compulsive gambling problem.

In each of the research reports summarized in Table 1, a representative, random-sample, telephone survey was conducted using an abbreviated form of the SOGS. That shortened SOGS simply consisted of several questions from the longer form.

Answers from the survey were then calculated to determine whether someone was a nongambler, a non–problem gambler, a problem gambler, or a compulsive gambler. Ladouceur assessed prevalence rates in Quebec in 1990 and found that 28% of his sample were nongamblers, 68.2% were non–problem gamblers, 2.6% were problem gamblers, and 1.2% were compulsive gamblers (Table 1).

The 1993 study by the Canadian Foundation on Compulsive Gambling (Ontario) reported even higher rates of problem gambling. This report claimed that 8.6% (7.7% problem plus 0.9% compulsive gamblers) of the people surveyed were either problem gamblers or “probable pathologic gamblers.” However, their higher rates could simply reflect the manner in which they used the SOGS. The irregularity of these findings indicates the need to reassess whether a screening tool such as the SOGS is a reliable survey tool. Currently several other organizations in Canada, the United States, and Australia are reviewing use of the SOGS in assessing the extent to which gambling is a problem in society.

In another province, Alberta, Wynne Resources surveyed the prevalence of problem gambling. The Wynne Resources study concluded that 4.0% of Alberta’s population were problem gamblers. In this study the percentage of compulsive gamblers was not differentiated.

### Table 1. Research reports on prevalence studies of nongamblers and non–problem gamblers, problem gamblers, or compulsive gamblers

<table>
<thead>
<tr>
<th>RESEARCH GROUP</th>
<th>YEAR</th>
<th>LOCATION</th>
<th>NONGAMBLERS (%)</th>
<th>NON–PROBLEM GAMBLERS (%)</th>
<th>PROBLEM GAMBLERS (%)</th>
<th>COMPULSIVE GAMBLERS (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ladouceur</td>
<td>1990</td>
<td>Quebec</td>
<td>28</td>
<td>68.2</td>
<td>2.6</td>
<td>1.2</td>
</tr>
<tr>
<td>Canadian Foundation</td>
<td>1993</td>
<td>Ontario</td>
<td>33</td>
<td>58.4</td>
<td>7.7</td>
<td>0.9</td>
</tr>
<tr>
<td>Wynne Resources</td>
<td>1994</td>
<td>Alberta</td>
<td>39</td>
<td>57</td>
<td>4.0</td>
<td>Category not used</td>
</tr>
<tr>
<td>Govoni et al</td>
<td>1995</td>
<td>Windsor, Ont</td>
<td>40</td>
<td>57.7</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Room et al</td>
<td>1998</td>
<td>Niagara Falls, Ont</td>
<td>13</td>
<td>82.6</td>
<td>4.4</td>
<td>Category not used</td>
</tr>
</tbody>
</table>
Identifying problem and compulsive gamblers

It is interesting to note that Govoni et al\textsuperscript{11} identified the largest percentage of nongamblers in Windsor in 1995. This large percentage of nongamblers, however, more accurately reflects the number of those who reported they had never been to the casino to gamble.

Like the Ontario and Alberta studies, Govoni and colleagues\textsuperscript{11} found that about 60\% of their sample were gamblers who were not experiencing any problems with their participation in gaming activities. Yet they also found that 1.1\% were problem gamblers and 1.1\% were compulsive gamblers.

The most recent study, by Room et al,\textsuperscript{12} identified the prevalence of problem and compulsive gamblers as 4.4\% in Niagara Falls, Ont, in 1998. In sharp contrast with other studies, this study found that only 13\% of the sample were nongamblers. That decrease in nongamblers cannot be read directly as a dramatic increase in gambling. Instead, once a casino is built as a major tourist attraction, a correlation between numbers attending gambling venues and amounts spent becomes essential to assessing the extent of possible social problems.

Generalizing from these studies, we can conclude that about 1\% of the Canadian population (using Quebec and Ontario as representative samples) are compulsive gamblers. So, as with other forms of deviant behaviour (psychopaths, for example), there is a 1 in 100 chance that someone has a serious gambling problem.\textsuperscript{14} More importantly, these research reports indicate that about 4\% of people (by adding the sum of problem and compulsive gamblers as surveyed by Ladouceur,\textsuperscript{8} Wynne Resources,\textsuperscript{10} Govoni et al,\textsuperscript{11} and Room et al\textsuperscript{12}) have a gambling problem. In other words, problem gambling does exist. In fact, about one in every 25 people who have ready access to gambling venues gambles too much.

These studies also indicate that the prevalence of compulsive gambling in Canada is no different from that in the United States. On their website (www.health.org/mayo/9712/htm/gambling.htm), the Mayo Clinic reported similar rates when they wrote, “Most people who wager don’t have a problem. But a minority—an estimated 1 percent to 2 percent of the general population—become compulsive gamblers.”\textsuperscript{15}

All in the timing

It should be noted that each report listed in Table 1 represents findings at a time when the expansion and promotion of casino gambling opportunities were relatively new. Serious gambling problems might need 2 to 5 years to become more visible. Gamblers have had increasing access to gambling opportunities for the last 30 years, in the form of bingo and lotteries. Yet the current widespread promotion of gambling as an attractive leisure activity—along with opportunities to place larger wagers—could indeed become a greater threat to those who gamble and to those already experiencing some gambling problems.

These statistics do not provide a face to problem or compulsive gamblers. Traditional stereotypes of the problem gambler as a slick, ostentatious man who risks all at a fancy, high-stakes game of poker bear revision. Today, problem gamblers are just as likely to be male or female, young or old, rich or poor.\textsuperscript{16} While most people engage in gambling activities for fun, excitement, and sociability, problem and compulsive gamblers focus on winning money and “chasing” their losses.

In fact, “chasing” may be the most visible indicator of problem gambling. Chasing was first defined by Dr Henry Lesieur in his pioneering work on gambling, The Chase.\textsuperscript{17} Chasing best describes an obsessive, compulsive, or overwhelming drive to engage in gambling; trying to win “back” or retrieve money lost during gambling activities.

Certainly an obsession with gambling can be a problem. Yet, for anyone needing to assess whether or not a person has a gambling problem, more information about the nature of gambling as an addiction could prove beneficial.

Gambling as a problem or compulsion

Currently, the most pervasive medical definition of compulsive gambling is set forth by the American Psychiatric Association (APA) in their Diagnostic and Statistical Manual of Mental Disorders (DSM-IV).\textsuperscript{18} The APA classifies compulsive gambling, also called pathologic gambling, as an impulse-control disorder. The APA claims that this disorder has strong parallels to substance dependence.

The DSM-IV lists 10 criteria for problem gamblers.\textsuperscript{18} Compulsive gamblers are identified as exhibiting at least five of the characteristics listed in Table 2.

The APA begins the list of criteria by naming “preoccupation” as the first characteristic. Then, as with other addictions, the DSM-IV stresses the progressive nature of the problem gambler’s need for increased stimulation. This criterion is identified as the next important indicator through “increased” spending.

Lack of control is listed as a third criterion for assessing problem gambling. The issue of control can
be identified through a failure in efforts to stop or even, as a fourth criterion, restlessness or irritability when attempting to stop.

The next diagnostic indicator concerns emotions. Is the gambler using gambling as an escape from anxiety, depression, or guilt? The DSM-IV also questions whether escapism and action or excitement are important motivators, implying that a strong need to hide from life mentally by gambling indicates problem gambling.

Moral lapses are yet another indicator of problem or compulsive gambling. These lapses can consist, in part, of lying to family members, therapists, or others about the gambling. Dishonesty could also include the more serious misdemeanours of illegal behaviours.

Further, if gambling interferes with life itself or necessitates borrowing in order to relieve desperate financial stress, a person is deemed to be a problem or compulsive gambler.

For most criteria, characteristics of compulsive gambling listed in the DSM-IV have a direct parallel with items on the SOGS. The SOGS added, however, that the social context—whether or not family members and friends have a gambling problem—is an important element. Recent research on gambling and dopamine-related genetic configuration certainly suggests the possibility of inherited addictive tendencies. But the APA, with its emphasis on individual pathologies, makes no reference to this aspect of problem or compulsive gambling.

Table 2 also summarizes the traits of problem gamblers as defined by Gamblers Anonymous (GA). Gamblers Anonymous has played a pioneering role in encouraging the medical profession to address compulsive gambling. The organization’s “Twenty Questions” is a self-diagnosis tool that also provides useful criteria for identifying problem gambling (Table 3). As Table 2 indicates, GA tends to define gambling primarily as a financial addiction. According to this group, gambling becomes a problem when it interferes with a person’s job and leads to financial mismanagement or illegal financial behaviours. Gamblers Anonymous expands the notion of chasing by including borrowing, neglecting to pay back debts, and causing unhappy relations in the home.

It should be noted that GA also identifies one indicator not mentioned in the DSM-IV. In their “Twenty Questions,” they include the plan to commit suicide as another trait of problem and compulsive gambling.

This comparison between APA criteria, the SOGS list of traits, and criteria used by GA highlights the
more important traits of gambling as an addiction. Instead of gambling as a form of budgeted recreation and a feasible source of entertainment, problem and compulsive gamblers use this form of leisure in a detrimental manner.21

It should be emphasized that the lists of traits and characteristics are not complete. No mention is made of the personality traits of problem and compulsive gamblers, for example. The main reason for that omission is a lack of conclusive evidence. A review of the research on gambling as a personality disorder has not yielded any conclusive information, according to extensive research conducted by Dr. Michael Walker and reported in The Psychology of Gambling.22

Another shortcoming of the criteria listed in Table 2 is that the list does not address the issue of irrational thoughts. Research has shown that gamblers tend to think they have some control over gambling technologies; they may believe there is legitimacy to their “feeling lucky” or validity to “the gambler’s fallacy” (the idea that with time and repeated attempts, the win must happen).16

While the traits listed in Table 2 are not comprehensive, this summary of DSM-IV and SOGS criteria, along with the very practical experiences of GA, provides a useful starting point for identifying problem and compulsive gamblers. These people are preoccupied with gambling to the point where gambling drastically interferes with a healthy, balanced lifestyle; they might need treatment to overcome their addiction. And people encountering a problem or compulsive gambler will find it helpful to have some familiarity with treatment options.

Table 3. Twenty questions from Gamblers Anonymous: Seven or more positive responses indicate a gambling problem.

1. Have you ever lost time from work due to gambling?
2. Has gambling ever made your home life unhappy?
3. Has gambling affected your reputation?
4. Have you ever felt remorse after gambling?
5. Do you ever gamble to get money to pay debts or otherwise solve financial difficulties?
6. Does gambling cause a decrease in your ambition or efficiency?
7. After losing, do you ever feel you must return as soon as possible and win back your losses?
8. After winning, do you have a strong urge to return and win more?
9. Do you often gamble until your last dollar is gone?
10. Do you ever borrow to finance your gambling?
11. Have you ever sold anything to finance your gambling?
12. Are you reluctant to use “gambling money” for normal expenses?
13. Does gambling make you careless of your own welfare or your family’s?
14. Do you ever gamble longer than you had planned?
15. Have you ever gambled to escape worry or trouble?
16. Have you ever committed, or considered committing, an illegal act to finance gambling?
17. Does gambling cause you to have difficulty sleeping?
18. Do arguments, disappointments, or frustrations create within you an urge to gamble?
19. Do you ever have an urge to celebrate good fortune by a few hours of gambling?
20. Have you ever considered self-destruction as a result of your gambling?

Treatment strategies
Many therapeutic strategies have been explored with problem and compulsive gamblers. These strategies range from cognitive, behaviourial, and pharmacologic approaches to group, residential, and self-change therapies.

When gambling was first acknowledged as a treatable problem, cognitive therapy was seen as the best approach, especially in response to that classic misconception, the gambler’s fallacy. In The Psychology of Gambling,22 for example, Walker claimed that cognitive therapy would be most effective in coping with gambling problems because this approach directly addressed the irrational thinking of the gambler. Use of the cognitive approach was supported by Ladouceur and colleagues working with problem gamblers in Montreal, Que. Ladouceur8 reported that correcting the irrational beliefs of video poker players greatly reduced their urge to continue playing.

Cognitive therapy alone has not been found to have high rates of recovery, however.23 Even in GA, only 8% of those who attend a first meeting stay for 1 year.24

First of all, problem and compulsive gambling is a complex addiction including financial, emotional, and social dysfunctions (Table 2). Further, the whole field of addictions continues to baffle the scientific community. Recovery rates have not been high for any of the addictions.
Currently the most promising approach to addiction is the process model pioneered by Prochaska and DiClemente. This approach identifies a series of distinct stages in the treatment process for personal change. It thereby underscores the notion that remediation of addictive behaviour is a highly complex process, suggesting that no one therapeutic approach would be capable of fostering long-term change.

Table 4: **Summary of therapeutic approaches**

<table>
<thead>
<tr>
<th>TRANSFORMATION STAGE</th>
<th>THERAPEUTIC APPROACH</th>
<th>EXAMPLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precontemplation</td>
<td>Public and professional awareness</td>
<td>Advertisements, billboards, reliable research</td>
</tr>
<tr>
<td>Contemplation</td>
<td>Self-identification tools, confrontation or motivation</td>
<td>Twenty questions from GA Approach to interventions from Miller and Rollnick²⁵</td>
</tr>
<tr>
<td>Action</td>
<td>Behavioural, cognitive, pharmacologic, residential, or outpatient group therapy</td>
<td>Desensitization Cognitive restructuring Serotonin reuptake inhibitors Relaxation or family therapy Gamblers Anonymous</td>
</tr>
<tr>
<td>Maintenance</td>
<td>Continued group involvement Self-education</td>
<td>Gamblers Anonymous or institutionally organized group Bibliotherapy</td>
</tr>
<tr>
<td>Relapse</td>
<td>Harm reduction</td>
<td>Might return to precontemplation, but more likely to be at contemplation stage again</td>
</tr>
</tbody>
</table>

Table 4²⁵ summarizes the various therapeutic approaches by building on the Prochaska and DiClemente model of change. Transformation stages are precontemplation (that stage when the need for change has not yet been personally identified), contemplation of the need to change, acting on the perceived need to change, maintaining transformation, and a possible relapse stage. Each of these stages is matched with a variety of therapeutic approaches and specific examples of these types of therapies.

**Key points**

- Canadian studies indicate that about 5% of those who gamble are “problem gamblers” and about 1% are “compulsive gamblers.”
- While most people gamble for fun, excitement, and sociability, problem and compulsive gamblers focus on winning money and “chasing” (winning back) their losses.
- The Diagnostic and Statistical Manual of Mental Disorders, 4th edition, classifies compulsive gambling as an impulse-control disorder. The condition has strong parallels with substance dependence.
- Treatment strategies have included cognitive and behavioural therapy, medication, group counseling, and self-change, but currently the model of Prochaska and DiClemente is seen as most appropriate for changing complex addictive behaviour.

**Points de repère**

- Des études canadiennes font valoir qu’environ 5% des personnes qui s’adonnent au jeu sont des «joueurs à problèmes» et qu’environ 1% sont des «joueurs compulsifs».
- Si la majorité des gens jouent pour le plaisir, l’exaltation et la nature sociale de l’activité, les joueurs à problèmes et compulsifs se concentrent sur le gain d’argent et la récupération des sommes perdues.
- La quatrième édition du Manuel diagnostique et statistique des troubles mentaux catégorise le jeu compulsif comme un trouble de maîtrise des impulsions. On peut tirer des parallèles étroits entre ce comportement et la toxicomanie.
- Au nombre des stratégies de traitement figurent la thérapie cognitive et comportementale, la médication, le counseling en groupe et le changement de soi, mais à l’heure actuelle, le modèle de Prochaska et DiClemente est considéré comme le plus approprié pour changer ce complexe comportement de dépendance.

Public awareness is a crucial component of the precontemplation stage (Table 4). While problem or compulsive gamblers might not yet have become aware of the need for change, others need to be made aware of the problem: identification of a possible problem can be prompted by media advertising, for example.
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When gamblers begin to contemplate the need for change, self-identification tools such as GA’s “Twenty Questions,” in addition to the skills of a counselor using Miller and Rollnick’s guidelines for motivating change, can be crucial. At this stage, for example, Miller and Rollnick warn counselors or advisors against a confrontational approach. Instead they advocate using a non-directive, empathetic approach to encourage self-identification of an addiction problem.

Action can be the most complex part of the change process. Several therapeutic options are listed at this point. Each example of therapeutic approaches listed for this stage has had limited success. For example, desensitization can be used as behaviour modification: this approach could consist of taking a gambler to a gambling location and not participating for an extended period.

Other approaches at the action level include cognitive restructuring, pharmacologic interventions, prolonging treatment on an outpatient or residential basis, or encouraging long-term participation in GA.

In general, research on treating problem or compulsive gamblers advocates a combination of several approaches. For example, the pharmacologic strategies used for other obsessive-compulsive disorders, combined with several other treatment strategies, have been effective for severe cases.

Although the action stage is often the most complex, longitudinal research on recovery rates indicates that the maintenance phase is the most difficult. Long-term moderation or abstinence from an addictive behaviour, even one like gambling, is difficult to maintain.

Inability to maintain long-term abstinence or control might, in fact, support the claim that relapse is the crucial stage in the recovery process. While professionals are inclined to perceive relapse or the return to addictive behaviours as failure, the Prochaska and DiClemente model recognizes this stage as an important opportunity to return to the contemplation stage and intensify work at each of the subsequent stages for improved recovery at the maintenance stage. Relapse could in essence lead to greater confidence in staying abstinent from or maintaining control over an addiction.

For anyone advising a problem or compulsive gambler, therefore, the recommended recovery process would combine several approaches. Planning a diversified treatment strategy would require familiarity with both the options and community resources. Provincial hot-lines and their toll-free telephone numbers currently provide helpful information about these resources.

Conclusion

Problem and compulsive gambling does exist. It harms both gamblers and their families and friends. Consistent therapeutic support for victims and relations of problem gamblers plays a crucial role in the recovery process.

In the last 10 years, we have gained a much-improved understanding of the nature of the problem. And while the complexity of a gambling addiction is daunting, we have also gained a wider variety of treatment options.

Health professionals, however, need to maintain a broader concern with the expansion of the gambling industry in Canada. Should increased problems be noted, the more effective strategy might not be merely to help clients individually. Instead we might need to take a more active role in lobbying for responsible gaming policies. Research on alcoholism shows advertising to encourage smart use is effective.

The expansion of gambling in attractive casinos with VLTs and on the Internet is certainly a new development in Canada. Our best defense against problem gambling and compulsive gambling could well be an informed concern.

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References