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A view to a drink: James Bond's drinking over six decades

Or:

Dying for a drink: James Bond's drinking over six decades

Or:

Licence to drink: James Bond's drinking over six decades

Or:

James Bond's drinking over six decades: Time for professional help?

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Abstract

Objectives To describe the patterns of alcohol use in James Bond movies over six decades.

Design Content analysis.

Setting Wide range of international locations in 24 James Bond movies (Eon Productions series, 1962 to 2015).

Main outcome measures Drinking episodes by Bond and women characters, alcohol product placement, blood alcohol concentrations, and relevant DSM-5 criteria.

Results

Bond shows a fairly consistent pattern of heavy drinking across six decades (109 drinking occasions, averaging of 4.5 per movie). His peak observed binge involved 24 units of alcohol (6 vespers, around 360 mg/dL blood alcohol), enough to kill some people from alcohol poisoning. We ranked him as having "severe" alcohol use disorder with 6/11 positive answers on DSM-5 criteria for alcohol use disorder. Chronic risks for Bond are frequently drinking prior to: fights, driving vehicles (including chases), high stakes gambling, using complex machinery/devices, contact with dangerous animals, extreme athletic performance and sex with enemies or with guns/knives in the bed. Notable time trends included a decline in using alcohol as a weapon (p -trend=0.023), a rise in alcohol products in his environment (product placement of alcohol brands, $p<0.00001$), but temporal stability in his martini consumption. Drinking levels by the lead women characters and a random ($n=30$) subset of his sexual partners, were fairly stable over time, but also occasionally involved binges.

Conclusion There is strong and consistent evidence that James Bond has a chronic alcohol problem on the "severe" end of the spectrum. He should consider seeking professional help and try to reduce on-the-job stress.

What is already known on this topic

- Problematic alcohol consumption by James Bond has only been considered for the Bond books (Johnson et al 2013 in the *BMJ*), a fictional genre with only a tangential link to the content of James Bond movies.

- In other health-related domains, the trends over time for Bond are mixed. Whereas his smoking has declined (quit since 2002), his world increasingly involves severe violence.

What this study adds

- In this analysis over six decades and 24 movies, Bond shows a fairly consistent pattern of heavy drinking (109 drinking occasions, averaging of 4.5 per movie).
- Bond's peak binge involved 24 units of alcohol (6 vespers, around 360 mg/dL blood alcohol), enough to kill some people from alcohol poisoning. High intakes, combined with hazardous activities after drinking, pose risks of harm (eg, via fights, vehicle chases, contact with dangerous animals, and sex with enemies or with guns/knives in the bed).
- He is likely to have a "severe" alcohol use disorder with 6/11 positive answers on DSM-5 criteria for alcohol use disorder.

Introduction

The peer-reviewed literature on James Bond has now delved into his smoking,^(Wilson & Tucker, 2016) violent behaviour,^(McAnally et al., 2013) and his psychopathology (including 32 extreme behaviours^(Alrutz et al., 2015) and a "dark triad" of abnormal psychology^(Jonason et al., 2012)). The literature has also included a study of sex role stereotyping in his world^(Neuendorf et al., 2010) and a dermatological study of movie villains even includes the Bond character "Dr No".^(Croley et al., 2017) But the work on alcohol consumption by Bond has only been for the Bond novels,^(Johnson et al., 2013) a fictional genre with only a tangential link to the content of James Bond movies. Also, the movie series has a far greater audience than the books, given it is the longest-running movie franchise globally with the fourth highest revenue in history.^(Wikipedia) Therefore we aimed to describe alcohol use in the full James Bond movie series to date.

Methods

Two of the researchers watched all the 24 James Bond movies in the Eon Productions series from 1962 to 2015 (for DVD details see Table A1). Another of the researchers (PS [***DH? also]), who already had familiarity with all the movies, also watched selected segments where there was uncertainty about coding decisions (with final decisions made by consensus). Data collection was on a standardised paper form covering the following topics.

Alcohol use events by Bond: Where Bond was seen drinking (the glass/bottle reaching lips) this was considered an "observed alcohol use event". Where the alcohol brand or bottle label was not apparent, we assessed that the beverage was alcohol on a "balance of probabilities" basis. We classified other events as "alcohol use assumed" in circumstances where actual drinking was not observed but where alcohol was on the table in front of him and he was likely to have consumed some at that event or setting. In contrast, we did not assume that alcohol was consumed by Bond when alcohol was present but he was in a dangerous situation eg, where he might be poisoned (for classification examples see Table A2).

Alcohol use events by women characters: As per the classification system above, we also considered alcohol use by the lead woman character in each movie. These were based on the order of the cast list on IMDb (the Internet Movie Database: <https://www.imdb.com/>). Due to his large numbers of sexual partners (n=60),^(Wilson & Tucker, 2016) we randomly sampled drinking by this group at two movies per decade.

Estimating peak alcohol intake by Bond: For two highest binge events we estimated units of alcohol consumed and blood alcohol levels. UK measures were used (eg, a measure of spirits is 25 mls), along with units of alcohol (10 mls of alcohol, [equivalent to 8 g of pure alcohol]). Blood alcohol concentrations were computed with the commonly used Widmark formula as outlined elsewhere.^(Andersson et al., 2009) In these calculations, Bond's weight was considered to be that of an average UK man (84 kg).

Activities occurring after Bond drinks: The activities following drinking by Bond were identified in the period up to the time that he was presumed to go to sleep at the end of that particular day. These activities involving Bond included: fights, driving vehicles, gambling, sex, and operating complex machinery or devices etc.

Alcohol used as a weapon: These data included where either alcoholic drinks were used as a vehicle for a drug, or where a bottle was used in a fight or starting fires (eg, as a Molotov cocktail).

Alcohol product placement: Data on specific alcohol brands that were visible were collected (eg, on a beverage container or in an advertisement in the background). Evidence for product placement was cross-checked with a website on product placement in movies^(Jones) and with the names of alcohol companies listed in the movie credits.

Alcohol use disorder assessment: To determine if Bond's alcohol use was problematic, we (particularly the psychiatrist on the team (DH)) considered the collected qualitative and quantitative data collected in terms of the DSM-5.^(DSM-5 Task Force)

Table A1: Sources for the various DVDs of the Bond series of movies [To move this table into the Appendix at the final stage***]

Movies	Source
"Dr No" to "Die Another Day" (20 movies)	007 James Bond Ultimate Collector's Set. Distributed by Twentieth Century Fox Home Entertainment
"Casino Royale"; "Quantum of Solace"; and "Skyfall"	007 The Daniel Craig Collection, MGM
"Spectre"	Spectre, MGM, www.foxconnect.com

Table A2: Examples of exclusions and inclusions of alcohol-related data involving more complex classification issues [To move this table into the Appendix at the final stage***]

Details	Movie (time from start)
Exclusions	
Assumed no drinking by Bond: Bond is offered a "vodka martini" by the host in a tent in the Egyptian desert, but Bond doesn't answer this question and we see no alcohol present. While he does stay the night at this place, it seems probable that he was more focused on other recreational activities.	"The Spy Who Loved Me" (at 22 minutes [m])
Assumed no drinking by Bond: Near the end of the movie when Bond is captured he is given a drink on the orders of his captor (Kananga), but he is not seen to consume any of it. In this case we assumed no consumption as he was obviously in a very dangerous situation and was about to attempt an escape.	"Live and Let Die" (at 1 hour [h] 49m)
Assumed no drinking by Bond: Bond is at a very tense dinner with the villain Khan who has captured him, and Magda. But neither he (nor any of the other people at the table) is seen consuming any of the alcohol provided. In this case we assumed no consumption as the discussion at dinner was around the way Khan planned to use various drugs on Bond to get him to talk – and so he should have been very concerned about poisoning risks.	"Octopussy" (at 52m)
Assumed no drinking by Bond: The scene is in a virtual reality simulation used for training purposes at Bond's workplace (MI6). At the start of the sequence the scene including Bond has a table with a decanter, ice bucket and glass with a brown liquid (probably whisky).	"Die Another Day" (at 1h 3m)
Inclusions	
Assumed subsequent drinking by Bond: Champagne is delivered to Bond's hotel room (by Whisper) and while he is not seen consuming it, we assumed it would be unlikely to be "wasted". That is we assuming drinking by Bond that evening, potentially also after the visit by Rosie (the double agent who visits him).	"Live and Let Die" (at 31m)
Assumed very recent drinking by Bond: In a private plane, Bond is with a woman and beside them is an open bottle champagne with the words "Bollinger" on the ice bucket. There are also two glasses – and both look to be around one third full each, fairly suggestive of recent consumption.	"Moonraker" (at 2m)

Results

Bonds drinking has averaged 4.5 drinking events per movie (median = 4, range = 2-9) with no statistically significant trend over the six decades (Table 1).

The type of drink consumed by Bond has remained diverse over time (Table 1), possibly whatever he can get his hands on. He does however, seem to have a preference for the top shelf: cocktails or other spirits (55% of all drinks). This has included a cocktail he designed himself (a "vesper"), as per his instructions to a barman and him giving it a name (in "Casino Royale"). Also included in this category is his fairly stable level of martini consumption over time (Table 1). He was only seen to drink beer on four occasions and none is low-alcohol. One statistically significant downward trend over time has been use of alcohol as a weapon by all characters including Bond (p-trend = 0.0228). This has mainly been in the use of bottles in fights, but also for drug delivery (eg, chloral hydrate in drinks) and for starting fires on two occasions.

The lead women characters and Bond's sexual partners also had a fairly stable pattern of drinking over the six decades (Table 1). But a contrast for the latter was the persisting combination of drinking with smoking in the last decade (eg, by Séverine in 2012) whereas Bond has not smoked while drinking since 2002.

After drinking Bond frequently engages in a wide range of potentially high risk activities (Table 2). These included fights, driving vehicles (including chases), using complex machinery (eg, flying a helicopter), contact with dangerous animals, and sex. The latter is noteworthy as it was sometimes with enemies who also drank (eg, Elektra King) and also with guns/knives in the bed (eg, Jinx activated a flick knife in bed during a post-coital moment). Similarly, in terms of dangerous animals Bond has been under the influence when escaping a komodo dragon, escaping a tarantula, and playing a drinking game with a scorpion on his hand. The extreme complexity of the mix of his post-drinking tasks include: operating nuclear power plant machinery, destroying (virtually single-handedly) Dr No's complex, combined with killing Dr No, rescuing Honey Ryder, and escaping the island. Similarly, on another post-drinking occasion he successfully kills the "Man with the Golden Gun", accomplishes the mission goal (retrieving a "solex" unit), and escapes the island before it is destroyed. Performing all these types of activities after drinking has not declined over time and indeed high stakes gambling by Bond after drinking has significantly increased over the decades (Table 2).

There was extensive qualitative data that allowed us to detail many problematic aspects of Bond's drinking behaviour (Table 3). For example, Bond's peak observed binge drinking event involved an estimated 24 units of alcohol (6 vespers, around 360 mg/dL blood alcohol), which is well into the range that can be fatal (ie, over 300 mg/dL (Afshar et al., 2016) (Table 3). The next heaviest binge that could be estimated involved around 12 units (180 mg/dL). Other notable features include a medical scan that showed that his liver was "not too good" and a MI6 report on Bond that stated that "alcohol and substance addiction indicated" (Table 3). Nevertheless, he has partial insight as he admits to drinking "too much". The only health consequence of alcohol ever discussed by Bond or any of his associates was liver disease (n=3 occasions, Table 3).

Given the DSM-5 criteria outlined in Table 4, Bond was classified as having "severe" alcohol use disorder with 6/11 positive answers. However, three of the women characters also had heavy drinking events (one at a levels enough to cause staggering and double vision, Table 3).

Bond's environment appears to contain a lot of alcohol and this has increased significantly over time (ie, Table 5 showing a rise in the product placement of alcohol brands, $p < 0.00001$). This pattern was partly driven by significant upward trend in the less well defined alcohol products which would require familiarity with that particular product eg, based on the shape and colouring of the bottle ($p < 0.0001$).

Table 1: Drinking by Bond and other characters by decade

Alcohol-related theme	1960s	1970s	1980s	1990s	2000s	2010s	All	P-trend*
Number of movies	6	5	5	3	3	2	24	NA
Total movie time (hours)	12.02	10.28	10.88	6.28	6.38	4.85	50.70	NA
<i>Drinking by Bond</i>								
Total number of drinking events by Bond per decade	29	15	23	10	23	9	109	0.5074
Alcohol use events by Bond per movie (number) (n=109 in total)	4.8	3.0	4.6	3.3	7.7	4.5	4.5	0.5074
Bond smokes while seen drinking	14%	14%	10%	0%	12%	0%	10%	0.3256
Time-to-first drink for Bond (mean minutes from start of movie)	24.7	17.8	20.4	27.0	22.7	20.0	22.0	NA
Bond's drink was a cocktail or spirits (%) (n=59)**	66%	40%	35%	60%	59%	78%	55%	0.4501
Bond's drink was a martini (%) (n=18)	14%	20%	13%	20%	18%	22%	17%	0.4891
Bond's drink was a champagne or other type of wine (%) (n=45)**	31%	60%	65%	40%	32%	11%	42%	0.2600
<i>Drinking by women characters</i>								
Any drinking by the lead woman character in each movie (%)***	83%	100%	80%	33%	100%	100%	79%	0.7595
Average number of drinking events per movie by the lead woman character (n=37 in total)	1.2	1.4	1.8	0.7	2.7	2.0	1.5	0.3583
Any drinking by Bond's sexual partners (random selection of 2 movies per decade, n=30 partners) (%)	60%	33%	67%	60%	67%	60%	57%	0.2473
<i>Other</i>								
Alcohol mentioned in some way outside of Bond's drinking events (number)	8	11	10	6	7	9	51	0.0789
Alcohol/container is used as a weapon (number)	6	4	4	0	1	0	15	0.0228

* The denominator was the total minutes of movie time per decade except for italicised p-values where the trend in percentages was considered more appropriate.

** Excludes an episode with mixed spirits and wine consumed.

*** Given Bond's proclivity to sleep with nearly every woman he meets, nearly all of this group (92%; 22/24) were also sexual partners (ie, just not his boss "M", and Camille Montes ("Quantum of Solace")).

Table 2: Activities following a drinking event by Bond and occurring prior to the end of that particular day (covering all levels of drinking and order by frequency)

Type of activity after drinking by Bond	1960s	1970s	1980s	1990s	2000s	2010s	All	P-trend*
Any sex involving Bond (usually implied and counting multiple partners in the same evening as just once)	9	8	13	5	4	2	41	0.5030
Any fighting involving Bond (counting just multiple fights once)	13	9	6	1	6	3	38	0.1931
Any operating of complex machinery/devices by Bond**	5	1	4	2	2	1	15	0.7155
Any driving of a car or truck by Bond (including at high speed)	2	0	3	2	5	0	12	0.1723
Any athletic extremes by Bond outside of fight situations (eg, jumping large distances, full speed running)	3	1	3	0	2	2	11	0.6215
Any gambling by Bond (always for high stakes)	1	0	2	1	6	0	10	0.0380
Any contact with dangerous animals***	1	0	0	0	0	2	3	0.2083
Total	34	19	31	11	25	10	130	0.7684

* As per the footnote in Table 1.

** Includes flying a helicopter, driving other vehicles (eg, speed boats), using spy gear, cracking opening safes and doors with coded locks, working with electricity, shooting guns (outside of fights), trying to work a defibrillator on himself, retrieving a “solex” unit, and operating nuclear power plant machinery.

*** Includes escaping a komodo dragon, escaping a tarantula, and a drinking game with scorpion on his hand.

Table 3: Qualitative details on alcohol use by Bond and his associates (in chronological order)

Alcohol-related issue	Details of alcohol use themes	Movie
<i>Involving Bond</i>		
1. Bond drinking “filthy stuff”	Bond is with Ali Kerim Bey (station head in Turkey) and both describe the local Turkish drink “raki” as “filthy stuff” (at different times). This could partly refer to it being relatively low quality (eg, high in components such as tannins that might cause headaches), but an implication could be that Bond is keen to drink anything alcoholic, regardless of quality.	“From Russia with Love” (1963)
2. Others describe Bond’s interest in drinking	Felix Leiter says: “Ten will get you one it is one of a drink or a dame” when talking about Bond’s likely activities. This suggests that Leiter considers that Bond has a strong interest in seeking alcohol.	“Goldfinger” (1964)
3. Others describe Bond’s heavy drinking	“Liquor for three” is what Felix Leiter says when Bond boards a plane near the end (as the only passenger). The implication is that Bond will be drinking at the equivalent level of three people.	“Goldfinger” (1964)
4. Example of a heavy drinking episode by Bond after three previous drinking	Bond is alone in a hotel room anticipating a visit from the villain Elliot Carver’s people, so he is seen getting his gun ready. He has been drinking vodka shots (neat) and the vodka bottle appears to be 40% to 50% empty. His mood looks like he may be depressed and he may be thinking about his ex-girlfriend (Paris Carver) who is now the wife of Elliot Carver. This impression is supported when	“Tomorrow Never Dies” (1997)

Alcohol-related issue	Details of alcohol use themes	Movie
Involving Bond		
sessions that same day	Paris appears and how he talks to her abruptly eg, “why did you marry him”. Using the 40% empty estimate for the vodka bottle, we calculated 12 units of alcohol drunk on this single occasion giving him a blood alcohol of around 180 mg/dL. But this will be a marked underestimate as this was Bond’s fourth drinking episode on that same day (the most recent being the drinks at Carver’s launch event).	
5. Example of a very heavy drinking episode by Bond	Bond is on a private plane flight with René Mathis, and the bartender in the plane states that Bond has drunk “six of them” (a cocktail called a “vesper”). Bond’s movements seem a bit slower than usual, and he didn’t know what he was drinking when asked by Mathis. Bond could be grieving over the recent death of Vesper Lynd, or at least planning his revenge, perhaps to obtain a “quantum of solace”. Mathis appears to recognise Bond’s psychological disturbance and offers him “sleeping pills” or “pain pills” to help him, which Bond declines. Based on the bartender’s detailed description of the drinks he made for Bond, we estimated 24 units of alcohol drunk on this single occasion (and it is possible he kept drinking for the rest of the flight). At this level of intake we estimate a blood alcohol level of around 360 mg/dL (within the lethal range which typically begins around 300 mg/dL (Afshar et al., 2016)). Furthermore, it would take around 24-hours for his liver to metabolise all this alcohol, which would impair his on-the-job performance the following day.	“Quantum of Solace” (2008)
6. Report of problems on a scan of Bond’s liver	After being released from prison in North Korea, Bond’s body is being scanned. A voice of a medical assessor says during the body scan: “liver not too good”, after which we hear “It’s definitely him then”. This exchange implies that Bond’s past heavy drinking is regarded as an identifying feature of him.	“Die Another Day” (2002)
7. Bond drinking day after day while looking depressed (and mixing drinking with taking pain relief medication)	Bond has recently been injured by a gunshot and is resting at a remote beach location. He is seen drinking while in bed with a woman, then consuming pills (presumably pain relief medication), and then participating in a fairly dangerous drinking game with a scorpion on the back of his hand. Next day he is seen drinking spirits (neat) alone in a bar. The overall impression is one of depression and reckless fatalism.	“Skyfall” (2012)
8. MI6 Report on Bond indicating alcohol addiction	Raoul Silva is an ex-MI6 operative-turned cyberterrorist who has captured Bond. Silva reads out a MI6 Report on Bond’s fitness to be an agent: “Alcohol and substance addiction indicated”. Silva also says that Bond is: “barely held together by your pills and your drink”.	“Skyfall” (2012)
9. Bond’s self-assessed excess drinking	At a medical clinic in the Austrian alps, Bond is interviewed by the clinician Dr Madeleine Swann. She asks “How much alcohol do you consume?” and Bond replies: “Too much”.	“Spectre” (2015)
Involving others		
10. Alcohol and liver disease	Mr Osato (a villain) to Bond: “I always take a glass [of champagne] in the morning. You should try it”. Bond: “It’s bad for your liver isn’t it”. Mr Osato: “Nonsense...”.	“You Only Live Twice” (1967)
11. Alcohol and liver disease	“M” (Bond’s boss at MI6 declining the offer of a drink): “Not for me thanks, doctor’s orders”. Bond: “Pity about your liver Sir...”.	“Diamonds are Forever” (1971)

Alcohol-related issue	Details of alcohol use themes	Movie
Involving Bond		
12. Example of lead woman character getting drunk	Dr Madeline Swann drinks red wine while sitting on the floor (when with Bond in a hotel room in Morocco). She gets obviously drunk and falls over when getting up (Bond catches her). She also says that she can see two of him, indicating that she has double vision: “look there are two of you”; “two James’s, lucky me”. It seems likely that her blood alcohol is at least in the range of 100–199 mg/dL which is the level that staggering occurs. If so, she will have consumed 4 to 8 units (47% to 87% of a bottle of wine for a 55 kg woman). But this could be an underestimate given that double vision typically occurs at higher levels of 200+ mg/dL (eg, according to: http://www.alcoholalert.com/blood-alcohol-level.html). (A level of 250 mg/dL would mean she had consumed 1.1 bottles of wine.)	“Spectre” (2015)
13. Another example of binge drinking by a lead woman character	Stacey Sutton drinks red wine at a meal with Bond in her home. There is one empty bottle visible and Bond pours from another one that is left at only 10% full. If they drank equal amounts of this wine then she will have consumed around 7 unit and have a blood alcohol level of around 170 mg/dL. However, she shows no obvious signs of impairment.	“View to a Kill” (1985)
14. Impaired behaviour by a character	Countess Lisl von Schlaf has just consumed a bottle of champagne with Bond. She stumbles when walking, presumably due to her being a bit drunk.	“For Your Eyes Only” (1981)

Table 4: How Bond’s drinking relates to criteria for alcohol use disorder (DSM-5 criteria, with six or more of these features indicating “severe” alcohol use disorder)

	DSM-5 questions*	Our assessment	Supporting details (item numbers refer to the previous table)
1	Had times when you ended up drinking more, or longer, than you intended?	Yes	When asked by a clinician “How much alcohol do you consume?”, Bond replies: “Too much” (Item 9, Table 3).
2	More than once wanted to cut down or stop drinking, or tried to, but couldn’t?	Unclear but possible	The comment in the row directly above may suggest that this is possible for Bond, but we don’t know of any serious attempt by him to cut down. Indeed, his long-term drinking pattern is relatively stable (see Table 1), and he has not shifted to low-alcohol products.
3	Spent a lot of time drinking? Or being sick or getting over other aftereffects?	Yes	Drinking seems to be a common activity for Bond as per the data in Table 1. There are also the various comments by Leiter on Bond’s interest in drinking (Items 2 and 3). For specific examples of long drinking occasions there is the drinking by Bond at the remote beach location (Item 7). Also the day in which he has four drinking episodes, including the very heavy one prior to the visit by Paris Carver (Item 4). The medical scan of Bond’s liver showing problems would also suggest a lot of time spent drinking (Item 6).
4	Wanted a drink so badly you couldn’t think of anything else?	Unclear but possible	There are no occasions where this impression is definitely conveyed by Bond. But there is no doubt that there are occasions where he seems very keen on a drink, eg,:

	DSM-5 questions*	Our assessment	Supporting details (item numbers refer to the previous table)
			<ul style="list-style-type: none"> • He gulps down “Siamese vodka” without dilution after a fight (“You Only Live Twice”, 1967). • After another fight, he skulls brown liquid (probably whisky) directly from a decanter (“Casino Royale”, 2006). • After a car chase and fight he drinks a glass of spirits in three gulps (“Quantum of Solace”, 2008).
5	Found that drinking—or being sick from drinking—often interfered with taking care of your home or family? Or caused job troubles? Or school problems?	Yes	In terms of job troubles, there is a period where Bond is considered unfit to be an agent and an internal MI6 Report on Bond's fitness notes: “Alcohol and substance addiction indicated” (Item 8). Furthermore, his boss “M” seems aware of his heavy drinking when she says to him: “Ran out of drink where you were, did they?” (“Skyfall”, 2012). Bond also drinks at his workplace (his MI6 office) from a hip flask – while apologising to the picture of Queen Elizabeth II on the wall (“On Her Majesty's Secret Service”, 1969).
6	Continued to drink even though it was causing trouble with your family or friends?	Unclear but possible	Bond's friendships appear largely transitory and he seems to have no living relatives. It is possible that his drinking interferes with establishing long-term relationships, but this is unclear (those women he seems keen on a long-term relationship with, all die).
7	Given up or cut back on activities that were important or interesting to you, or gave you pleasure, in order to drink?	Unclear but possible	There are limited data on Bond's leisure interests (other than womanising during which he often includes drinking in the mix, Table 2). At some of the high consumption levels he achieves (eg, 24 units on one occasion (Item 5)) it would seem likely that sexual performance would be seriously impaired (erectile dysfunction etc).
8	More than once gotten into situations while or after drinking that increased your chances of getting hurt (such as driving, swimming, using machinery, walking in a dangerous area, or having unsafe sex)?	Yes	As per data in Table 2, Bond has drunk alcohol before many situations involving a risk of harm (fast driving, fighting, and using machinery etc). There is a high probability that much of his sex is unsafe given that he never discusses barrier contraception, doesn't appear to carry condoms and has even had sex underwater (which can complicate condom application and dilutes the lubricant).
9	Continued to drink even though it was making you feel depressed or anxious or adding to another health problem? Or after having had a memory blackout?	Yes	Bond continues to drink despite a MI6 Report indicating he has an alcohol use problem and also a liver problem on a medical scan (Item 6). Also, on specific occasions when he looks depressed he continues to drink heavily – even very heavily (see Items 4 and 5).
10	Had to drink much more than you once did to get the effect you want? Or found that your usual number of drinks had much less effect than before?	Yes	We consider this very likely given that he has an extremely high tolerance level for alcohol. That is he could still talk without obvious slurring after consuming at least 24 units of alcohol on a single occasion (Item 5).
11	Found that when the effects of alcohol were wearing off, you had withdrawal symptoms, such	No	Despite his apparently high chronic alcohol intake and heavy drinking episodes, Bond displays none of these problems. Indeed, he nearly always shows

	DSM-5 questions*	Our assessment	Supporting details (item numbers refer to the previous table)
	as trouble sleeping, shakiness, restlessness, nausea, sweating, a racing heart, or a seizure? Or sensed things that were not there?		amazingly fast reflexes and athletic capacity – winning a great majority of all his fights and only occasionally experiencing gunshot wounds (despite thousands of bullets being shot at him).

* These questions are all preceded with “In the past year, have you:” but given our unavoidably fragmentary look into Bond’s life, we have taken a long-term perspective.

Table 5: Types of alcohol in product placements, mentions of brands and types of alcohol, and visible alcohol brands

Characteristic	1960s	1970s	1980s	1990s	2000s	2010s	All	P-trend*
All product placement								
All products (including alcohol but also cars etc)	30	34	38	34	62	60	258	<0.0000001
Product placement of alcohol (brand imagery seen or verbal mention)**								
Champagne	0	4	3	2	2	2	13	0.1890
Other wine	0	0	1	0	0	0	1	0.7649
Spirits	0	0	1	3	1	1	6	0.0564
Beer	1	0	1	0	2	1	5	0.2084
Alcohol product only likely to be noticeable to those very familiar with it	0	0	0	2	3	5	10	<0.0001
Total	1	4	6	7	8	9	35	<0.00001
Noticed alcohol product placement (n=35) as a proportion of all product placements (above row as numerator and top row as denominator)	3.3%	11.8%	15.8%	20.6%	12.9%	15.0%	13.6%	0.2679

* As per the footnote in Table 1.

** Excludes some reported “product placements” (n=2) in which the product was not seen or mentioned in the movie but which were involved in off-screen promotions. We also excluded three brands that were considered to be fictitious (eg, the Thai wine called “Phuyuck”).

Discussion

It is almost certain from the available quantitative and qualitative data that James Bond has a chronic drinking problem. Indeed, this appears to be “severe” according to the DSM-5 criteria (Table 4). His drinking problem has also been suggested from an analysis of his drinking in the Bond novels. This complementary work identified that his maximal intake on one day was 50 units, (Johnson et al., 2013) which if drunk over 12 hours would give him a blood alcohol of around 610 mg/dL. Such a level would kill nearly everyone (eg, the highest blood alcohol in a living person in study of 46,000 patients at a trauma centre was 613 mg/dL (Afshar et al., 2016)).

Despite a high chronic intake, and sometimes drinking to levels well within the fatal zone for alcohol poisoning, Bond’s health is not obviously too impaired. Although his

liver is “not too good” (Table 3), he shows no dermatological or other physical signs of alcoholism. Even his teeth are in good shape despite a high level of champagne consumption (dental erosion is linked to high sparkling wine use^(Schlueter & Tveit, 2014)).

Many environmental factors are likely to be sustaining Bond’s high alcohol use. Alcohol products seem to be all around him and even at an increasing level (Table 5). The women he associates with drink (79%, Table 1), his workplace colleagues drink (including his boss “M” on the job), the villains he engages with often drink, as do most (57%) of his sexual partners (Table 1). Some of the latter also clearly drink heavily (eg, Madeleine Swann, Stacey Sutton, and Countess Lisl von Schlaf; Table 3). Of course he also has a high-stress lifestyle – and it is understandable he might feel like an occasional drink after multiple people have just tried to kill him.

Risk reduction strategies that Bond could consider

Ideally Bond needs to seek urgent professional help for his drinking. But a few potential interim strategies to minimise his risks include the following:

- Avoid drinking on the job full stop. This is especially so when anticipating a gun fight with multiple attackers or when likely to be poisoned (given these are common on-the-job problems). Complex tasks, such as aerial combat in helicopter gunships and de-activating nuclear weapons, are all best done with zero blood alcohol. Given repeated occasions of having been knocked unconscious in the past – be aware that alcohol may interfere with traumatic brain injury recovery.^(Ponsford et al., 2013)
- Avoid drinking with those sexual partners who may want to disable, capture or kill you, an estimated 15% (9/60) of them.^(Wilson & Tucker, 2016) Not drinking can also help with negotiating those delicate conversations with new partners around barrier contraceptive cover and sharing sexually transmitted disease histories.
- If you do have partners who drink – don’t let them smoke in bed (eg, as per Tiffany Case) as this is a fire risk. Also definitely don’t allow knives or guns in the bed (those guns you hide under the pillow can be used against you or be emptied by double-crossing lovers eg, Miranda Frost).
- It is a risk with additive behaviours to fetishize the substance of concern and its context. So become more aware of how you use your encyclopaedic knowledge of alcohol (of vintages, the design of cocktails etc) to project a connoisseur image of yourself and to show off your expensive tastes. Instead, try to cultivate a more detached perspective and build up alternative interests.

Creating a more supportive environment for Bond

Bond’s workplace (MI6) needs to become a responsible employer and help by referring him to work-funded counselling or psychiatric support services. As well as his alcohol use disorder, these services should determine if he has any post-traumatic stress disorder from killing so many people and from the time when he has been tortured (eg, in “Casino Royale” and “Spectre”).

Similarly, his workplace culture also needs to change – including “M” no longer offering Bond drinks in workplace settings. MI6 management also needs to re-design his job to lower the stress levels. There needs to be more field support and a team

approach, so everything is not so reliant on just Bond. Also a greater emphasis on negotiation between enemies would reduce the need for some of the killing (though possibly Bond isn't so well suited for diplomacy).

Conclusions

There is strong and consistent evidence that James Bond has a chronic alcohol problem on the “severe” end of the spectrum. He should consider seeking professional help and try to reduce on-the-job stress. His workplace (MI6) needs to become a responsible employer and refer him to support services, as well as changing its own workplace drinking culture.

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Appendix

[To shift some tables into the Appendix at the final stages***]