

Report to the Ministry of Health

Feedback to MOH re Emerging Trends in National & International Literature

Report No.22 covering 1st January 2021 to 30th June 2021

ABACUS Counselling Training & Supervision Ltd

Literature	Findings	Comment
<p>Predicting future harm from gambling over a five-year period in a general population sample: a survival analysis.</p> <p>Authors: Currie S, Hodgins D, Williams R & Fiest K.</p> <p>2021; BMC Psychiatry, 21:15 doi.org/10.1186/s12888-020-03016-x</p>	<ul style="list-style-type: none"> • The authors noted there had been little longitudinal evidence on cumulative harm associated with excess gambling over time. The authors analysed the level of gambling risk and outcomes of participants of two longitudinal studies (N=4212) over 5 years who exceeded low-risk gambling limits compared with those who didn't exceed these limits. • Low-risk gambling thresholds covered gambling frequency, expenditure and percentage of income spent on gambling. • Gambling harm levels were low-risk, and moderate (two or more of: feeling guilty from gambling, betting more than can afford, recognition of having a gambling problem, health problems from gambling, financial problems from gambling, receiving criticism from others for gambling, and borrowing to gamble) were outcome categories. • Other variables were measured, especially those that could be modified to reduce the harm from the moderate risk category. Co-variables included meeting DSM criteria Gambling Disorder, presence of a mental health disorder, having irrational gambling beliefs, the number of stressful life events in the previous 12 months, number of types of gambling games played each year, and whether EGMs were played and/or casino games. 	<ul style="list-style-type: none"> • This is an important topic of research in that it addresses gambling harm at a more populous level (sub-clinical) and suggests strategies to address the reduction of harm with this population. • This does present challenges in prevention of harm in that not all those meeting these risk thresholds experience consequential harm. • Also, this moderate 'risk for harm' group includes not just problem gamblers, but also 'sub-clinical level' gamblers who will not seek help. The help-seeking of problem gamblers is low (below 10% and may be considerably below this level), let alone those not experiencing harm, or if so, relatively low levels of harm. • Addressing coexisting mental health issues where help-seeking may be higher, may be an opportunity to screen for causes of the mental health problem (e.g. gambling), and brief early stage screens are available, designed for primary care professionals.

	<ul style="list-style-type: none"> • The authors noticed increased risk for gambling harm included exceeding the low-risk gambling harm limits at the initial research stage with harm within 5 years, as did the presence of a mental health disorder at initial stage, distortions of gambling cognitions at this stage, stressful life events, and playing EGMs/casino games. • Not all gamblers were impacted. After 5 years, 95% of those gamblers who didn't exceed low-risk limits survived harm, while those who exceeded all low-risk limits reduced to 83%. Each additional low-risk limit exceeded increased risk by 30% (these risk levels for harm mirrored increased risk for problem gambling level). • The authors concluded that the level of gambling involvement increased risk factors that could be 'highly modifiable' to prevent future harm. These included treatment for anxiety and depression, identifying those vulnerable for harmful stress (and addressing these), multiple gambling modes participating in as a measure of risk, population strategies (moderate gambling where most harm occurred- they noted 4 times the quantum of harm occurs at a 'sub-problem gambler' level, as at the problem gambler level), and promotions to correct erroneous beliefs. 	
<p>NZ National Gambling Study: Correspondence between changes in gambling and gambling risk levels and health, quality of life, and health and social inequities (NGS Series Report No.9) Final Report.</p>	<ul style="list-style-type: none"> • The authors noted in this NZ study, that problem gambling is associated with negative health, behavioural and sociological factors, with few studies identifying changes over time of gambling problems and these factors. • The authors noted changes between these factors between 2012 and 2015 using four data collection years. • They noticed likelihood of levels of connection between gambling risk levels, and these variables occurred with those changing from 'non-gamblers' to 'non-problem-gamblers', from 'non-problem-gamblers' to 'non-gamblers', and to 'risky-gambling' from 'non-problem-gambler'. 	<ul style="list-style-type: none"> • Although causative conclusions cannot be drawn from this study, there appears to be a consistent trend that follows negative trends of associations with gambling. • This study focuses upon the transitional comparisons as participants over the four years (2012-2015) moved from 'non-gamblers' to 'non-problem gamblers', from 'non-problem' to 'risky gamblers', and from 'risky' to 'non-problem gamblers'.

<p>Bellringer M, Janicot S, Ikeda, T, Lowe, G, Garrett N & Abbott, M.</p> <p>7th September 2020. AUT, Gambling and Addictions Research Centre.</p>	<ul style="list-style-type: none"> • They noticed commencing gambling (as a ‘non-problem gambler’) correlated with <u>reducing hazardous</u> drinking of alcohol, and <u>continuously hazardously</u> drinking alcohol (versus <u>never</u> drinking alcohol hazardously), and with reduced tobacco smoking (versus <u>never</u> smoking tobacco) • They also noticed stopping gambling (‘non-problem gambler’ changing to a ‘non-gambler’) did correspond with experiencing some level of deprivation, but also corresponded with <u>less likely</u> to be drinking alcohol hazardously (versus never drinking hazardously) and with having or developing a chronic illness during the study. • Also noticed, was for those moving from ‘non-problem gambler’ to ‘low/moderate/problem gambler’ i.e. moving to ‘<u>risky gambling</u>’, the likelihood increased of continuously smoking tobacco, continuous low quality of life, repeatedly experiencing one or more major life events in the previous year, starting to experience deprivation, and stopping being a member of an organised group. • Moving out of ‘risky gambling’ (to ‘non-problem gambler’) was less likely to be correlated with continuously drinking alcohol hazardously and/or with a continuously low quality of life. • The authors concluded that overall, moving to risky gambling was ‘most likely to be associated with maintaining or starting several negative health and lifestyle factors’ p7. 	<ul style="list-style-type: none"> • In each case, negative aspects appeared to correlate with starting or increased gambling, while alcohol problems or risk for these also appeared to increase. • This research appears to support increased risk for harm follows increased gambling participation and that gambling can have a wide impact upon the gamblers’ life.
<p>The impact of COVID-19 on gambling and gambling disorder: emerging data.</p> <p>Authors: Hodgins D & Stevens R.</p>	<ul style="list-style-type: none"> • The authors noted that the current pandemic had impacted upon commercial gambling in many of the world’s jurisdictions and sought to systematically review findings during this period on individual gambling and gambling disorder. • N=17 publications were either cross-sectional studies (n=11; 65%) or longitudinal (n=6) which included periods prior to the pandemic. 	<ul style="list-style-type: none"> • The impact of the current pandemic has had different outcomes in availability of land-based gambling throughout the world. • What has become apparent, is that the accessibility of online gambling provides continued connection for many to gambling, but also opens the door to continued use of

<p>(July 2021). Curr Opin Psychiatry, 34:332-343</p>	<ul style="list-style-type: none"> • Overall, there was, as expected, a reduction in gambling participation frequency and expenditure in all studies, with variable estimates in the general population who gambled and gamblers' overall participation online or generally. • They noted that online gambling was particularly problematic, due to lack of constraints, accessibility, its solitary nature, and the wide variety of gambling available with its higher levels of gambling disorder of participants, compared with land-based gambling. Causation still remains difficult to attribute. • The pandemic may result in first time online gambling for some gamblers, provide an emotional escape from problems and boredom, higher risk because of financial problems caused by the pandemic, as well as stock-trading in a volatile market. Alternatively, some land-based gamblers may take the opportunity to stop or reduce their gambling as a result of inability to access their preferred gambling, with a positive outcome. • Online gambling increased between 11%-20% after excluding the highest and lowest estimates. • There were correlates of increased gambling more likely with severity of gambling, younger age groups, those with mental health concerns, and with being male. • The authors concluded that the impacts of the pandemic were diverse, with some reducing current or future problems, while others in vulnerable groups increasing their gambling problems. • Further later assessment may be required to identify consistent trends; however, they concluded that in the short term, those with existing gambling problems should be identified as a vulnerable group. 	<p>a less controlled mode of gambling, even when the pandemic ends.</p> <ul style="list-style-type: none"> • This study focused upon gambling during general lockdowns, when access to land-based gambling reduced. The authors noted gambling frequency and expenditure overall reduced, but that certain groups remained at risk; these were those already gambling problematically, younger males, and those with mental concerns (which may be a broad group during the pandemic). • Gambling increased online, as might be expected, while continued use may require further time and research to quantify the problems that arise from this risky mode.
<p>Online gambling in unprecedented times: risks and safer strategies</p>	<ul style="list-style-type: none"> • The authors note that as land-based gambling opens, focus may realign with those gambling modes, but that 'the pandemic has 	<ul style="list-style-type: none"> • Although there are clear higher risk factors associated with online gambling, and evidence for continued use post-lockdown of

<p>during the COVID-19 pandemic.</p> <p>Authors: Stark S & Robinson J</p> <p>(2021). J of Gambling Issues, 47, 409-418.</p>	<p>changed the (online) gambling industry and players for the long term' p409.</p> <ul style="list-style-type: none"> • They note many gamblers will be unwilling to access land-based gambling venues without a vaccine, while waves of the pandemic mean many land-based services are not fully offering the pre-pandemic options, and many seeking to legally establish online options. They see online gambling as remaining relevant, citing a report (SynergyBlue, 2020) that 23% of gamblers intending post-lockdown to spend more money on land-based gambling, and 93% intending to continue online gambling post-lockdown. • They noted variable participation and spending throughout many countries, but noted of particular concern, increases in online playing, especially those playing more than one type of gambling game (42%; Stradbroke 2020), more time and money (27%; higher if multiple games played (68%)), and gambling session of more than one hour increasing by 23%. They cited (Nielsen, 2020) that 'since the beginning of lockdown, 17% of the gamblers in NZ have worried about their gambling'. • The authors proposed several initiatives that: online providers should initiate for safer play; they include avoiding provision of high risk games (e.g. faster games, autoplay, reverse withdrawals, and bonuses, and identified regulators in countries that have initiated these safeguards. Others are, monitoring of players and identifying changes where risk has increased, interacting with players to raise examples of risk and promoting informed gambling. Also, setting of self-determined limits, avoiding misleading advertising, and online staff training to reduce harm. Information and resources should be directed at all gamblers (not just 'problem gamblers'). 	<p>online gambling sites, challenges for increased mitigation of risk for gambling harm exist online.</p> <ul style="list-style-type: none"> • Motivation to participate in safer gambling will conflict with competition to encourage participation and maximise earnings, with controls varying by country. • Regulators' powers and motivation to provide safe gambling processes may vary when many gamblers are accessing from overseas and harm is not experienced in the country where the online provider is based. • In many cases, the sites where the online gambling is provided will be chosen for less exercising of control, and in small countries, few gamblers from that country will access the service. Similar arrangements existed in the past, with offshore banking where services focused upon users from other countries, with business focus prioritising over obligations to other countries and their population. • These are sound restraints raised to offset gambler harm, especially with the additional risk found with online gambling over land-based options. However, the targeting of regulators may be more effective than calling upon online providers to restrain their profit-margins, especially with reduced understanding of this new and growing mode of gambling within a changing environment of lasting pandemic.
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<p>The gambification of digital games.</p> <p>Authors: Brock T & Johnson M.</p> <p>(2021). J of Consumer Culture, Vol 21(1), 3-13.</p>	<ul style="list-style-type: none"> • The authors noted that ‘consumers can now play games and gamble in real time and from any location’. They also noted that ‘skin betting’ or wagering of virtual appearances within games or on 3rd party websites, betting on outcomes of e-sports (competitive digital gaming - similar to sports betting), and loot boxes, all describe the interaction of gaming and gambling. • The rapid development and changes in these opportunities can make research difficult, but many digital games are becoming increasingly ‘gambified’, with video games ‘increasingly using gambling systems ..to appeal to a range of demographics including children and adolescents’ pp4-5. They refer to the UK Gambling Commission (2018) concern at the blurring of gambling and gaming and the effect on vulnerable audiences (Parliament House of Lords, 2020) • The authors provided research into how ‘real money gameplay’ cuts across gambling and gaming boundaries. • The authors, however, focused more upon the aspect of consumption of gaming products, rather than gambling or gaming, and the need for more research from this broader perspective. 	<ul style="list-style-type: none"> • This is an interesting study, noting with interest the growing interaction between gambling and gaming, but also the understudied connection with consumption. • However, from a gambling harm perspective, there is a very real concern about the speed of the increase in gambling involvement and the gambling of money or items of value in games, and the relative delay in regulator involvement or interest. • In NZ, the Gambling Act refers to wagering of money, not items of value, and is restricted to control of providers based in NZ. The reality of internationally-based providers being beyond NZ regulator control, gambling with items of value rather than money, and the rapidity of virtual gaming-gambling development, all appear to be difficult aspects to control, but not restriction of help such as therapy, awareness raising, and research into what is a near future or even current problem that may impact upon vulnerable people (e.g. youth), especially in an environment of a persistent pandemic.
<p>Loot boxes, gambling, and problem gambling among young people: results from a cross-sectional online survey.</p>	<ul style="list-style-type: none"> • The authors noted that ‘new forms of hybrid-gambling have emerged’ and conducted research upon ‘those most likely to engage: young people’ p267. • N=3,549 of 16-24 year olds were surveyed in Great Britain, identifying past year purchase of loot boxes, engagement in 17 forms of gambling (and periodic spend), and problem gambling status (PGSI). 	<ul style="list-style-type: none"> • This research supports the findings of the previous study and raises growing overseas concerns at the blurring of gaming and gambling, a young and vulnerable group, and the degree of overlap between gaming and ‘problem gambling’.

<p>Authors: Wardle H & Zendie D.</p> <p>(2021). Cyberpsychology, behavior, and social networking, vol 24 (4), 267-274.</p> <p>Review: The WAGER</p> <p>May 18, 2021. www.basisonline.org/</p>	<ul style="list-style-type: none"> • 16.9% of those who purchased loot boxes in the last year scored as ‘problem gamblers’ (scored 8 or more on the PGSI). Of loot box purchasers, 62.8% had gambled in the past year and loot box purchasers were ‘highly engaged in other forms of gambling’ p269. • Those who purchased look boxes were more likely to be gamblers and ‘problem gamblers’. Those who purchased loot boxes with their own money were 11.4 times more likely to experience gambling harm. • The purchase of loot boxes had a stronger relationship with ‘problem gambling’ than ‘many other forms of gambling-including playing slot machines or online betting’ p272. • The authors noted no restrictions or regulation of loot boxes in the UK. • They concluded that ‘young adults purchasing loot boxes within video games should be considered a high-risk group for the experience of gambling problems’.p267. • The Wager is a review platform by Harvard Medical School of selected addiction research. • The Wager reviewers noted that loot boxes and the games that include them are similar to the wide range of variety gambling games and formats, and that some games may appeal to those more at risk for gambling problems. • They noted with interest that money earned from selling (as opposed to gambling) items won in loot boxes was negatively associated with gambling harm and some may see this as a business. • They acknowledged the authors found a positive association between loot box spending and PG severity. 	<ul style="list-style-type: none"> • Although there is no direction of this connection (do gambling and gambling problems pre-date gaming, or the alternative?) the correlation is substantial and supports the need for regulation consideration, or at least further research.
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<p>Crime and problem gambling: a research landscape.</p> <p>Author: Ramanauskas S.</p> <p>(2020). The report of the Commission on Crime and Problem Gambling. UK.</p> <p>The Forward Trust (forwardtrust.org.uk)</p> <p>(2020). Funded by the UK Gambling Commission.</p>	<ul style="list-style-type: none"> • The Commission noted there was a relationship between disordered gambling and crime, with a wide range of crime not restricted to ‘white collar’ crimes, but included domestic violence, child neglect and others. • Research in Australasia, England, and USA was reviewed. • The causes of gambling crime are complex and may be interlinked with cross addictions, mental health disorders, impulse control and stressful life events. • Although there is recognition that ‘problem gambling’ is a behavioural addiction, it is often not a mitigating factor in sentencing, as AOD or mental health problems are. • There are often high numbers of ‘problem gamblers’ in prison although many may not be imprisoned as a direct result of gambling, with higher prevalence than in the general population. • There is limited treatment for gambling problems in prison, and there may be some resistance to undertaking ‘problem gambling’ treatment in prison. • It was noted that a small number of specialised gambling courts existed in the USA, but there is limited data on these. • In an undated posting, the Forward Trust in the UK posted the findings of a survey they conducted in 14 prisons in England and Wales. • They noted 23% of prisoners surveyed considered that they had a gambling problem, and 57% thought the treatment for ‘problem gambling’ should be offered in prison. • Only 2% of prisoners considered that their crime was driven by ‘problem gambling’, but 5% had lost jobs because of gambling, 14% had debt from gambling, and 11% spoke of gambling-related problems. 	<ul style="list-style-type: none"> • Criminal offending and gambling relationship has been identified in NZ (Abbott et al, 2001) and elsewhere. • This study by the Howard League emphasised the paucity of treatment available throughout the world. • Although the research indicated some reluctance of those in prison to participate in treatment for gambling harm, alternative research (below: Forward Trust) indicates some support exists. • Alcohol and other drug treatment in prisons is widespread in NZ, and may be a vehicle for treating gambling harm, especially as this research highlights the coexistence of other addictions and mental health with gambling problems.
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<p>The association between gambling and financial, social and health outcomes in big financial data.</p> <p>Authors: Muggleton N, Parport P, Newall P, Leake D, Gathergood J & Stewart N.</p> <p>(2021) Nature Human Behaviour, 5, 319-326.</p> <p>Reviewed by The WAGER, the publication of the Harvard Medical School reviewing selected addiction papers (BASIS) and gambling papers (WAGER).</p> <p>June 15th 2021, Volume 26(6) www.basisonline.org/</p>	<ul style="list-style-type: none"> • The authors assessed gambling as a proportion of monthly income, using 31 financial, social and health outcomes, with aggregated 6.5 million people over seven years, using bank data. • The association was measured through financial transactions related to the financial, lifestyle/leisure, and health outcomes, and these associated with gambling transactions. • Gambling was found to associate with higher financial distress, lower financial inclusion and planning, with negative lifestyle, health and wellbeing, and physical disability. There was also an association of gambling with ‘substantially increased mortality.’ • Gambling was found to be persistent over time, growing over the sample period, and the highest negative associations with the heaviest gambling. • WAGER noted that the study was based upon two datasets (a random sample (1) of 102,195 with active bank accounts in 2018 and (2) all 6,515,557 customers active in 2013 (disability, unemployment and mortality between 2014-2019). • They noted the gambling behaviour did not have a consistent relationship with lifestyle spending, such as spending on gaming or tobacco. • Sample 2 customers who spent a greater percent of their money in 2013 were more likely to be unemployed or experience disability, as measured by support payments received for these and were affected by greater mortality (death noted on the account 2014-19). • The WAGER reviewers confirmed that these findings were important in that gambling was associated with a ‘wide range of 	<ul style="list-style-type: none"> • This is an important study both because of the numbers of customer records analysed and the ability to identify statistical significance with a wide range of behaviours. • Although causation could not be established, there were strong associations, particularly for higher gambling (as a proportion of income), and concerns for health issues and even mortality, for these gamblers. • Big data is an important new approach for health research (more precise treatments, identifying at-risk patients, and other benefits – Hedges L 2019; Softwareadvice.com). • Although no causality could not be determined from this design, the benefit of a big data approach does indicate associations that are significant over a wide range of outcomes that smaller datasets would be unable to determine. This was a particularly large number of customers with many transactions per customer. • Although this may not be providing new outcomes suspected between gambling and financial, social and health outcomes, the strength of these associations provides both confirmation, as well as a role by banks to reduce and prevent future gambling harm. This may be a role that they may be willing to adopt, and some indicators are already apparent (personal discussion PGF and of
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	<p>negative outcomes, using objective, representative data based on millions of banking records’ p4.</p> <ul style="list-style-type: none"> • They noted that this was one of the largest studies ever conducted on gambling transactions in relation to other financial transactions. Strongest findings of association were with those displaying higher levels of gambling, and could assist with banks’ ability to develop messaging interventions in these situations to raise awareness at lower levels of gambling. • The WAGER noted that the staggered measurements of gambling and outcomes could not establish causality, as it (high levels of gambling and high levels of negative outcomes) may be explainable by ‘other underlying factors that drive both gambling and other behaviours’. 	<p>their developing relationship with Kiwibank, 2021).</p>
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