

The Responsible Gaming Intervention Effectiveness Scale (RG-IES)

SEPTEMBER 2024

RESEARCH BY
JONATHAN ROSS GILBERT, PHD
MARLA ROYNE STAFFORD, PHD

RESEARCH FUNDED BY



AMERICAN
GAMING
ASSOCIATION®

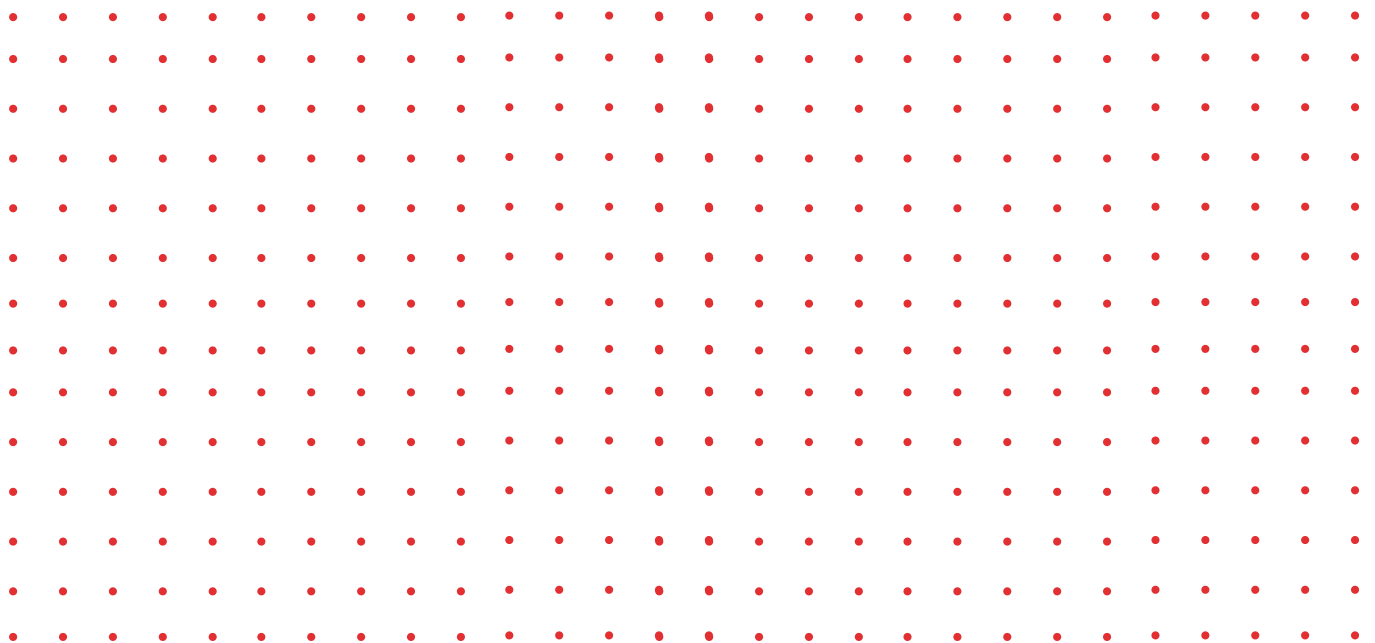
A MESSAGE FROM THE

American Gaming Association

The American Gaming Association (AGA) and its members Bally's, FanDuel and BetMGM are proud to have provided funding and access to players for the development of the Responsible Gaming Intervention Effectiveness Scale.

Promoting responsible play is a core value of the U.S. gaming industry, and it is our mission to ensure responsible gaming messages resonate with players and achieve their intended impact. This new scale provides academics, industry members and others interested in positive play with a research-based tool they can use to evaluate responsible gaming messages and serves as a stepping-stone to further research on how to best tailor these communications to players.

We look forward to continuing to lead our industry's efforts to promote responsible gaming and are committed to promoting the development of responsible gaming tools that are as innovative as the world-class entertainment options found on casino floors, sports books and iGaming options across the country.



A MESSAGE FROM THE Researchers

The U.S. gambling industry, bolstered by brick-and-mortar expansion and the growth in sports betting and iGaming, has grown significantly in recent years. Healthy gambling, marked by a responsible and measured approach, has significant social benefits as a form of recreation and entertainment. However, the expansion of new types of gambling require new approaches to ensuring that players are aware of the responsible gaming tools available to them.

Legal regulated play necessitates proactive safeguards to counteract gambling-related harms and ensure patrons stay in control. Sustained business success will be predicated on cultivating long-term customer relationships through transparency and demonstrating genuine care. We posit that the central tenet to player welfare is responsible gambling framed as a multi-faceted approach including education and awareness. One tool, recognized as having a powerful influence on informed decision-making and appropriate gambling behavior, is the design and implementation of responsible gambling messages.

Casino operators and sports books have (mostly) relied on traditional industry messages to warn bettors of the risks and potential gambling-related harms. Increasing evidence suggests that consumers, especially certain at-risk populations, are disengaged from or tuning out these advertisements. The gap lies in research at the intersection of “advocating for innovation” and “promoting responsible play” that informs the evaluation of message efficacy.

It is in that spirit, and with the generous support of the American Gaming Association and its members, that we developed the Responsible Gaming Intervention Effectiveness Scale (RG-IES) as a free apparatus to assess those messages intended to meaningfully impact the thoughts, feelings, and behaviors of gaming consumers. While no single scale or measurement tool is an elixir, it is an important starting point in evaluating whether or not a message has the potential to be effective with the public.

Standardization, and use, of tools to evaluate and enhance the effectiveness of responsible gambling messages will not only guide successful efforts in practice, but also guide research as academics, policymakers, and industry work together to ensure harm reduction for the betterment of society.

Sincerely,



Jonathan Ross Gilbert, PhD



Marla Royne Stafford, PhD

The Responsible Gaming Intervention Effectiveness Scale (RG-IES)

INTRODUCTION

Responsible gaming, also referred to as responsible gambling, has been a topic of considerable discussion over the years. The notion of responsible gaming was introduced into the gambling industry in the 1980s, when it was borrowed from the alcohol industry, which coined the term responsible drinking. The basic concept grew from consuming responsibly in one legal, but somewhat controversial activity, to another legal, but still controversial activity (Barry 2007). Despite the use of the term, recent discourse has suggested the phrase itself should be revisited, and new language should be considered (Gainsbury 2023; Stafford et al. 2024). Nevertheless, the foundation and goals of responsible gambling itself have not seemed to waiver.

Responsible gambling is clearly different from problem gambling; the former reflects an outcome that can even be a goal of a recreational gambler (Blaszczynski et al. 2022), while the latter is an activity that causes harm to the gambler, something that responsible gambling is believed to prevent. Research has suggested the two terms are often confused and must be clearly delineated to ensure individuals understand that responsible gambling is a positive outcome and something that can and should be achieved (Stafford et al. 2024).

Because of the conflation of the two terms, and the negative connotations they both spawn, players exposed to messages designed to encourage responsible play often pay them only selective attention (Stafford 2024). Selective attention is generated when consumers avoid messages they perceive as irrelevant within the overwhelming number of various communications people are exposed to on a daily basis (de Fockert et al. 2001; Florack et al. 2020). When selective attention is activated, the player simply avoids responsible gambling messages (Younes & Hronis 2023). Hence, the individual fails to process the message information. As such, it is important to create messages that avoid the clinical nature of traditional responsible gambling messages (McMullan & Miller 2010).

Specifically, messages designed by gambling operators ranging from traditional casinos to online gambling to sports betting should be more positive, fun and engaging so these marketing communications will capture the players' attention and serve as effective communications in reaching players (Harris, Parke, & Griffiths 2018; Rockloff et al. 2024). Furthermore, some argue that these advertisements should be utilized "in situ" where dynamic real-time messages that interrupt play may be most effective (Bjørseth et al. 2021; Monaghan & Blaszczynski 2007; Wohl et al. 2013).

Unfortunately, little research has been conducted on specific types of responsible gambling messages, and the little that exists is limited to very specific conditions with limited generalizability (e.g., Rockloff et al. 2024). In their review paper, Newall et al. (2023) conclude that a broad approach to message design is most appropriate based on potential individual differences that likely affect consumer response to messages. Indeed, individual traits do affect consumer reactions and processing of marketing communications, but if a message is considered effective overall in achieving its goals, such individual traits can be moderators that help operators understand how a specific characteristic will affect receptivity to effective messages, allowing the operator to best target different types of players. As such, we have developed a valid and reliable tool to ascertain the effectiveness of responsible gambling messages.

THE RESPONSIBLE GAMING INTERVENTION EFFECTIVENESS SCALE (RG-IES)

The Responsible Gaming Intervention Effectiveness Scale (RG-IES) was developed as a tool that casino and sports betting operators could use in developing appropriate and effective advertising messages. This tool was developed following the well-accepted process of scale development to ensure reliability and validity (Churchill 1979; Gerbing & Anderson 1988) and scale development studies (Akhavannasab et al. 2022; Böttger et al. 2017; Eppmann, Bekk, & Klein 2018). This process generally includes three major stages: (1) item development; (2) scale development; and (3) scale validation. These three stages can be further broken down into nine specific steps including domain identification, item generation, content validity, pretesting questions, survey administration, item reduction, latent factor extraction, dimensionality tests, reliability tests, and validity tests. As this scale was developed, the full process was conducted in partnership with several AGA members: FanDuel, Bally's and BetMGM, who provided access to players to test message effectiveness.

Construct definition and item generation preceded three separate studies that established the scale's dimensionality, psychometric properties, construct, predictive, and nomological validity. Based on domain sampling theory (Nunnally & Bernstein 1994), the initial pool of 300 items capturing the attitudes, subjective norms, perceived behavioral control, and intention dimensions of responsible gaming included items adapted from existing scales (e.g., positive play, problem gambling severity index, and attitudes toward gambling) and newly developed items based on the responsible gaming and advertising literature. Specifically, the measurement tool was designed using traditional advertising measures of effectiveness to assess whether viewers (players) will respond in a positive manner toward that message.

More than 5,000 American gamblers from a nationally representative (e.g., age, gender, geography, and loyalty status) subset of casino operators and sportsbooks participated across the three studies. Scale purification was achieved through exploratory and confirmatory factor analyses. The results provide support for the validity and reliability of the RG-IES instrument in the context of responsible gaming messaging research. It is important to note this scale assesses attitudes, intentions, social norms and behaviors in response to responsible gaming messages; it does not assess responsible gaming tools uptake.

Responsible gaming messages may be included as part of an overall advertising message where certain brief messages (e.g., 'please gamble responsibly') are included in the promotional message. However, with the growth of both corporate and tribal nation gambling, the legalization of both sports gambling across the United States and online gambling in certain states, it is important to create dedicated messages to the promotion and education of responsible gaming.

DESCRIPTION OF THE RG-IES SCALE AND ITS APPLICATION

The RG-IES Scale comprises 15 items (included in the scales below). Utilizing all items ensures a reliable and valid measure of advertising effectiveness as well as capturing the underlying dimensions of the scale (Attention & Engagement, Attitudes, Social Norms, Intention).

To utilize the tool to assess the potential message effectiveness, participants involved in the message testing should be presented with the definition of responsible gaming followed by the advertising message (see Exhibit 1). The amount of time the individual can view the ad is determined by the operator testing the message. After the message is viewed, participants are asked to "rate the extent to which you agree or disagree with the following statements about the advertising message you just viewed." Participants will then respond to each of the scale items based on the message they just viewed. Each item should be answered by responding with one choice on a Likert scale (Strongly Disagree to Strongly Agree). As indicated below, best practice is to randomize the display of items when presenting to respondents and to repeat the header throughout the scale.

SCALE SCORING, ASSESSMENT AND ANALYSIS

To score the scale for analysis, all items should be totaled and then divided by 15 to achieve an individual mean. This calculation is the actual number used for input into the measure analysis. Hence, the final score for the overall scale can range from 1-7.

The scale can be used to assess an individual message on its own or it can be used to compare two (or more) advertising messages. In the first case, the message can be assessed individually, and a score higher than the average measure (4.0) indicates the message is more effective than the average score of a particular message. To test if this difference is statistically significant, a z-score may also be calculated to assess the statistical significance of this score relative to the score's significant difference from the mean. In short, this test will assess how many standard deviations the score is from the scale mean.

In the latter testing situation, a score can be assessed for each messages tested. In the case of testing two different messages (often referred to as an A/B testing situation), it is recommended that a between subjects study be employed. That is, two different groups of participants should be used for the viewing of the two different ads; one group views one ad and the second group views the other ad. After each group completes the scale, the two means are compared and a t-test can be used to calculate the difference between the two means. If the t-test is statistically significant (at $p < .05$), the message with the higher mean indicates this message is more effective than the lower scoring message.

However, this means analysis must include an assessment of the two scores relative to the scale. That is, the higher scoring message should score above the mean (4.0) of the scale for the message to be considered effective. For example, two mean message scores of 3.85 and 1.2 might produce a statistically significant t-test between the two scored messages, but given that both messages scored below 4 (the mean of the scale), neither message is considered particularly effective, although the message with the score of 3.85 might be statistically and relatively more effective as compared to the other.

CONCLUSION

The integration of technology and media in the gaming industry has renewed calls for governments to take a public health-based approach to harm reduction (Newall et al. 2023; Ukhova et al. 2024). These potential harms, particularly when not well understood, are prone to disproportionate regulatory responses (Oliver et al. 2019). Industry is well-positioned to address governance challenges in a responsible manner that increases transparency and trust. Together, casino and sports betting operators can develop standards and best practices that ensure a consistent approach to mitigating gambling-related harm (Rockloff et al. 2024). This collective ambition may extend to the design, evaluation and implementation of effective safer gambling messages.

The development of the RG-IES allows organizations to reliably and validly assess potential responsible gaming messages. By utilizing the entire scale to assess potential messages, organizations and operators can engage in proper research to ensure effective messages. It is our hope that this tool will be used for the development of creative and effective messages to ensure individuals will attend to messages and process them as intended. Taking these actions will also significantly improve the measurement of responsible gaming message effectiveness and the communication of data demonstrative of controlled gambling.

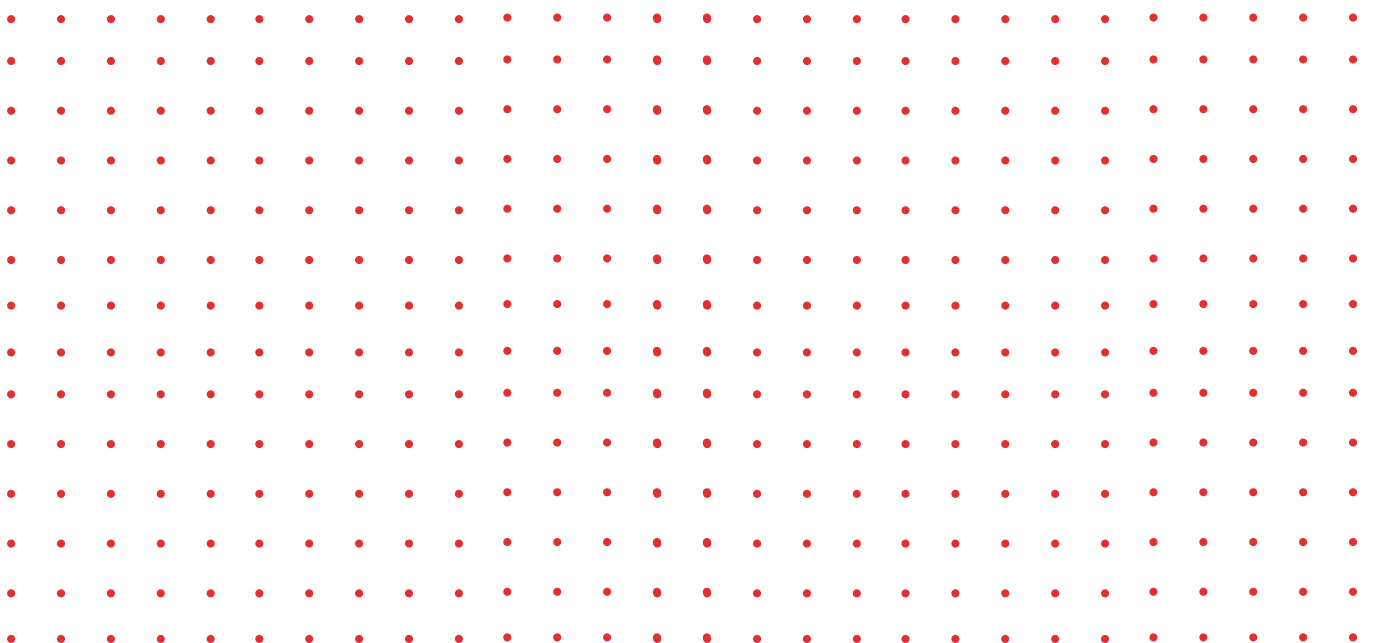


EXHIBIT #1

The Responsible Gaming Intervention Effectiveness Scale (RG-IES)

Responsible gaming has to do with the concept of reducing potential harm (financial, psychological, relational, legal) for gamblers. This term is completely different than problem gambling. Responsible gaming is about using gambling for fun and entertainment's sake while reducing potential harm.

Please take a moment to carefully review the following advertisement message:

[display randomized advertising message]

Please rate the extent to which you agree or disagree with the following statements about the advertising message you just viewed:

Likert Scale*

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Somewhat Disagree
- 4 = Neither Agree nor Disagree
- 5 = Somewhat Agree
- 6 = Agree
- 7 = Strongly Agree

**Best practice is to randomize the display of items when presenting to respondents and repeat headers.*

15 ITEMS

1

2

3

4

5

6

7

The ad content is **ATTRACTIVE** to me.

The ad catches my **ATTENTION**.

The ad arouses **INTEREST** in me.

The ad makes me **FEEL** something.

The ad **REMINDS** me to gamble responsibly.

The ad **HIGHLIGHTS** tools and resources to help me gamble responsibly.

The ad **TEACHES** me about responsible gambling.

The ad shows me that important others (e.g., family/friends) would support setting **LIMITS** on how **FREQUENTLY** I gamble.

The ad shows me that important others (e.g., family/friends) would support setting **LIMITS** on how much **TIME** I spend gambling.

The ad shows me that important others (e.g., family/friends) would support setting **LIMITS** on how much **MONEY** I spend gambling.

The ad shows me that important others (e.g., family/friends) agree that responsible gambling is **IMPORTANT**.

The ad shows me that important others (e.g., family/friends) agree that I could **BENEFIT** from responsible gambling.

After seeing the ad, I intend to **REDUCE** my average bet size.

After seeing the ad, I intend to gamble **LESS** frequently.

After seeing the ad, I intend to **LOWER** my gambling budget.

To score the scale for analysis, the scores for all items should be totaled and then divided by 15 to achieve an individual mean. Hence, the final score for the overall scale can range from 1-7.

The scale can be used to assess an individual message on its own or it can be used to compare two (or more) advertising messages.

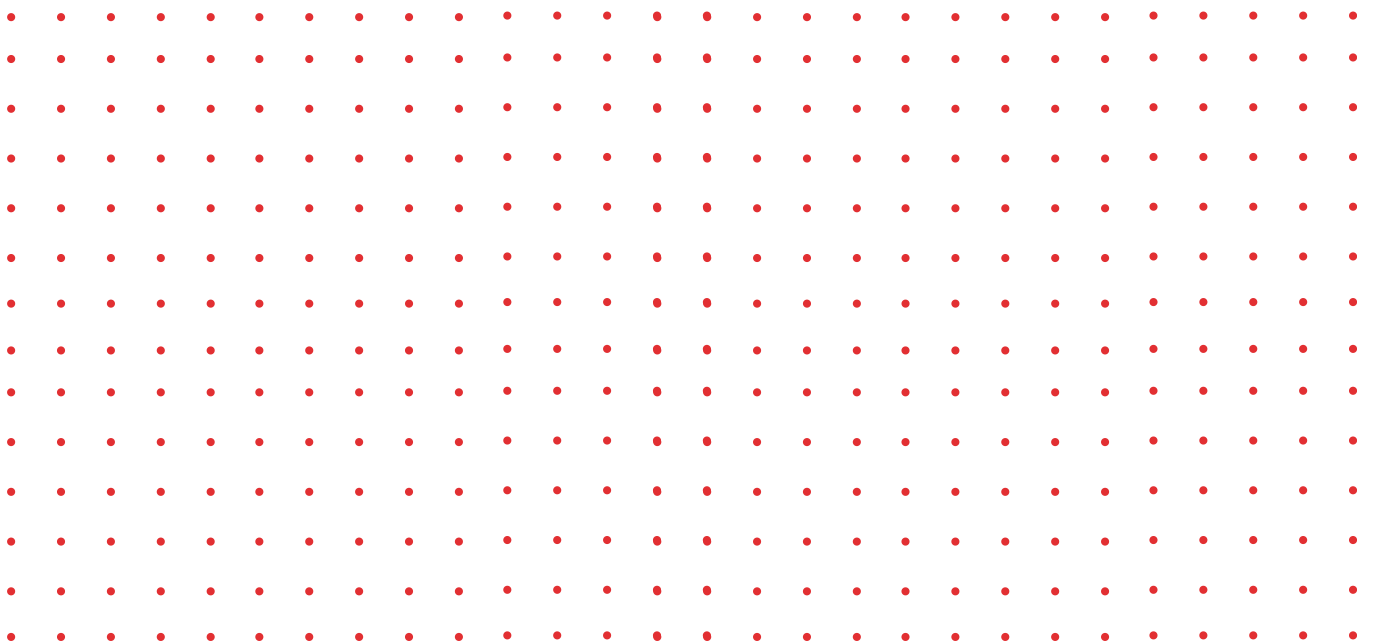
- When testing a single message, a score significantly higher (statistically) than the average measure (4.0) indicates the message is more effective than a message with the average score.
- When comparing two different messages, the higher scoring message should be considered the most effective assuming: (a) significantly higher (statistically) than the other message; and (b) significantly higher (statistically) than the mean (4.0) of the scale.

Any message scoring below 4.0 (the mean of the scale) would not be considered particularly effective and should be redesigned to better reflect the desired characteristics of a responsible gaming message.

Note on Contributors

Dr. Jonathan Ross Gilbert is Assistant Professor of Marketing in the James T. George School of Business at Hampton University (HU). Rich in history and tradition, HU is recognized as one of the top historically black colleges and universities in the world, and recently named the best private university in Virginia. Dr. Gilbert is widely acknowledged as a marketing scholar, award-winning educator and social justice advocate. His research examines the role of marketing strategy as a means of enhancing consumer and human well-being, the design of harm-reduction approaches in marginalized communities, and the promotion of agile learning through innovative pedagogies in higher education. He has published peer-reviewed articles in leading journals such as Journal of Business Research, Industrial Marketing Management, Journal of Public Policy & Marketing, Journal of Advertising, Journal of Services Marketing, Journal of International Advertising, and other high-quality outlets. Prior to academia, Dr. Gilbert worked as a marketing executive in the telecommunications, media and entertainment industries. He received a PhD in Marketing from the University of Rhode Island, an MS in Behavioral and Social Sciences Intervention from Brown University, an MBA from Harvard Business School, a MILR from Cornell University, and a BA in Economics from Pomona College.

Dr. Marla Royne Stafford is Professor of Marketing in the Lee Business School at University of Nevada-Las Vegas. She is also a Faculty Scholar with the UNLV International Gaming Institute as well as past William F. Harrah Distinguished Chair and Executive Associate Dean of Academic Affairs at the Harrah College of Hospitality. Dr. Stafford is a member of the advisory board of the Nevada Council on Problem Gambling and is serving as a guest editor for an upcoming special issue of the UNLV Gaming Research and Review Journal. Her research has been published in numerous refereed journal publications, and she has presented at numerous conferences including the 2024 Nevada Conference on Problem Gambling. Dr. Stafford is an elected Fellow and Past-President of the American Academy of Advertising (AAA) and her significant impact on the field earned her the AAA's 2024 Kim Rotzoll Award for Ethics and Social Responsibility in Advertising and the 2016 Ivan Preston Award for Outstanding Contribution to Advertising Research. She received her Ph.D. from the University of Georgia, her MBA from Rollins College, and her BA from the University of Arizona.



References

- Akhavannasab, S., Dantas, D. C., Senecal, S., & Grohmann, B. (2022). Consumer power: Scale development and validation in consumer–firm relationship. *European Journal of Marketing*, 56(5), 1337–1371.
- Barry, A.E. (2007). A theory-based commentary on the hypothesized impact of alcohol industry-sponsored responsible drinking campaigns." *Health Education Monograph Series*, 24(2), 1–4.
- Blaszczynski, A., Shaffer, H. J., Ladouceur, R., & Collins, P. (2022). Clarifying responsible gambling and its concept of responsibility. *International Journal of Mental Health and Addiction*, 20(3), 1398–1404.
- Bjørseth, B., Simensen, J. O., Bjørnethun, A., Griffiths, M. D., Erevik, E. K., Leino, T., & Pallesen, S. (2021). The effects of responsible gambling pop-up messages on gambling behaviors and cognitions: A systematic review and meta-analysis. *Frontiers in Psychiatry*, 11, 1670.
- Böttger, T., Rudolph, T., Evanschitzky, H., & Pfrang, T. (2017). Customer inspiration: Conceptualization, scale development, and validation. *Journal of Marketing*, 81(6), 116–131.
- Churchill, G.A. (1979). A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research*, 16, 64-73.
- deFockert, J. W., Rees, G., Frith, C. D., & Lavie, N. (2001). The role of working memory in visual selective attention. *Science*, 291(5509), 1803–1806.
- Eppmann, R., Bekk, M., & Klein, K. (2018). Gameful experience in gamification: Construction and validation of a gameful experience scale [GAMEX]. *Journal of Interactive Marketing*, 43, 98-115.
- Florack, A., Egger, M., & Hübner, R. (2020). When products compete for consumers attention: How selective attention affects preferences. *Journal of Business Research*, 111, 117–127.
- Gainsbury, S. (2023, September 25). Assisting customers to gamble in a sustainable way is the only win-win solution. *Global Gaming Business*. <https://ggbnews.com/article/assisting-customers-to-gamble-in-a-sustainable-way- is-the-only-win-win-solution/>
- Gerbing, D. W., & Anderson, J. C. (1988). An updated paradigm for scale development incorporating unidimensionality and its assessment. *Journal of Marketing Research*, 25(2), 186-92.
- Harris, A., Parke, A., & Griffiths, M. D. (2018). The case for using personally relevant and emotionally stimulating gambling messages as a gambling harm-minimisation strategy. *International Journal of Mental Health Addiction*, 16(2), 266-275.
- Monaghan, S., & Blaszczynski, A. (2007). Recall of electronic gaming machine signs: A static versus a dynamic mode of presentation. *Journal of Gambling Issues*, 20, 253–268.

Newall, P. W. S., Rockloff, M., Hing, N. et al. (2023) Designing improved safer gambling messages for race and sports betting: what can be learned from other gambling formats and the broader public health literature?. *Journal of Gambling Studies*, 39, 913–928.

Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric Theory* (3rd ed.). New York, NY: McGraw-Hill.

Oliver, K., Lorenc, T., Tinkler, J., & Bonell, C. (2019). Understanding the unintended consequences of public health policies: The views of policymakers and evaluators. *BMC Public Health*, 19(1), 1057.

Rockloff, M., Browne, M., Russell, A. M., Newall, P., Hing, N., & Armstrong, T. (2024). Testing the effectiveness of different safer gambling messages for sports and race betting: A five-week experiment. *Addictive Behaviors*, 149, 107893.

Stafford, M. R. (2024). Using creative advertising to overcome selective attention in responsible gambling messages. 7th Annual Nevada State Conference on Problem Gambling, May, 2024, Las Vegas, NV, United States.

Stafford, M. R., Hronis, A., Feldman, A., & Hartwell, T. (2024), Evaluating language and communication surrounding responsible gambling. *UNLV Gaming Research & Review Journal*, 28, 17-28.

Ukhova, D., Marionneau, V., Nikkinen, J., & Wardle, H. (2024). Public health approaches to gambling: A global review of legislative trends. *The Lancet Public Health*, 9(1), e57–e67.

Wohl, M. J., Gainsbury, S., Stewart, M. J., & Sztainert, T. (2013). Facilitating responsible gambling: the relative effectiveness of education-based animation and monetary limit setting pop-up messages among electronic gaming machine players. *Journal of Gambling Studies*, 29(4), 703–717.

Younes, N., & Hronis, A. (2023). A qualitative evaluation of a video gambling campaign among young Australians. *Discover Psychology*, 3 (22). <https://doi.org/10.1007/s44202-023-00084-4>

