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DAFTAR PUSTAKA

Abidin, S. R. Z., Noor, S. F. M., & Ashaari, N. S. (2019). Low-fidelity prototype design for serious game for slow-reading students. *International Journal of Advanced Computer Science and Applications*, *10*(3). https://doi.org/10.14569/IJACSA.2019.0100335

Abt, C. C. (1970). Serious Games. *Viking Press*. ttps://doi.org/10.1177/000276427001400113

AERA, APA, & NCME. (2014). Standards for Educational and Psychological Testing, 2014 Edition. In *American Educational Research Association (AERA) American Psychological Association APA, National Council on Measurement in Education (NCME)*.

Afroza, A., Murray, K., Wünsche, B. C., & Denny, P. (2021). Who am I? - Development and Analysis of an Interactive 3D Game for Psychometric Testing. In S. N. & J. V.L. (Eds.), *2021 Australasian Computer Science Week Multiconference, ACSW 2021*. Association for Computing Machinery. https://doi.org/10.1145/3437378.3442688

Alexiou, A., Schippers, M. C., Oshri, I., & Angelopoulos, S. (2020). Narrative and aesthetics as antecedents of perceived learning in serious games. *Information Technology and People*, *35*(8). https://doi.org/10.1108/ITP-08-2019-0435

Allen, M. J., & Yen, W. M. (1979). Introduction to measurement theory, Monterey, CA: Brooks/Cole, 1979. *Google Scholar*.

al-Qallawi, S., & Raghavan, M. (2022). A review of online reactions to game-based assessment mobile applications. *International Journal of Selection and Assessment*, *30*(1). https://doi.org/10.1111/ijsa.12346

Alserri, S. A., Zin, N. A. M., & Wook, T. S. M. T. (2020). Gender-based Game Engagement Model Validation using Low Fidelity Prototype. *International Journal of Engineering and Advanced Technology*, *9*(4). https://doi.org/10.35940/ijeat.d9042.049420

Altomari, L., Altomari, N., & Iazzolino, G. (2023). Gamification and Soft Skills Assessment in the Development of a Serious Game: Design and Feasibility Pilot Study. *JMIR Serious Games*, *11*. https://doi.org/10.2196/45436

Aneni, K., Gomati de la Vega, I., Jiao, M. G., Funaro, M. C., & Fiellin, L. E. (2023). *Evaluating the validity of game-based assessments measuring cognitive function among children and adolescents: A systematic review and meta-analysis* (pp. 1–36). https://doi.org/10.1016/bs.pbr.2023.02.002

UNIVERSITAS
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Anvari, F., Efendić, E., Olsen, J., Arslan, R. C., Elson, M., & Schneider, I. K. (2023). Bias in Self-Reports: An Initial Elevation Phenomenon. *Social Psychological and Personality Science*, *14*(6). https://doi.org/10.1177/19485506221129160

Arjoranta, J. (2019). How to Define Games and Why We Need to. *The Computer Games Journal*, *8*(3–4). https://doi.org/10.1007/s40869-019-00080-6

Armstrong, M. B., Landers, R. N., & Collmus, A. B. (2015). Gamifying recruitment, selection, training, and performance management: Game-thinking in human resource management. In *Emerging Research and Trends in Gamification*. https://doi.org/10.4018/978-1-4666-8651-9.ch007

Armstrong, M. B., Landers, R. N., & Collmus, A. B. (2016). Gamifying Recruitment, Selection, Training, and Performance Management. In *Emerging Research and Trends in Gamification*.

Arthur, W., Doverspike, D., Kinney, T. B., & O'Connell, M. (2017). The impact of emerging technologies on selection models and research: Mobile devices and gamification as exemplars. In *Handbook of Employee Selection, Second Edition*. https://doi.org/10.4324/9781315690193

Auer, E. M., Mersy, G., Marin, S., Blaik, J., & Landers, R. N. (2022). Using machine learning to model trace behavioral data from a game-based assessment. *International Journal of Selection and Assessment*, *30*(1), 82–102. https://doi.org/10.1111/ijsa.12363

Avedon, E. M., & Sutton-Smith, B. (1971). Games as structure. In *The Study of Games*.

Aydemir Dev, M., & Bayram Arlı, N. (2025). The Role of Personality Traits and Decision-Making Styles in Career Decision-Making Difficulties. *Behavioral Sciences*, *15*(2).

Baker, R. S., Clarke-Midura, J., & Ocumpaugh, J. (2016). Towards general models of effective science inquiry in virtual performance assessments. *Journal of Computer Assisted Learning*, *32*(3). https://doi.org/10.1111/jcal.12128

Banks, G. C., & McDaniel, M. A. (2012). Meta-Analysis as a Validity Summary Tool. In *The Oxford Handbook of Personnel Assessment and Selection*. https://doi.org/10.1093/oxfordhb/9780199732579.013.0009

Barends, A. J., de Vries, R. E., & van Vugt, M. (2021). Construct and Predictive Validity of an Assessment Game to Measure Honesty–Humility. *Assessment*. https://doi.org/10.1177/1073191120985612

Barrick, M. R., & Mount, M. K. (2003). Impact of meta-analysis methods on understanding personality-performance relations. In *Validity generalization: A critical review.*

UNIVERSITAS
GADJAH MADA
DARI TEORI KE PERMAINAN: MODEL PENGEMBANGAN DAN VALIDASI GAME-BASED ASSESSMENT CONSCIENTIOUSNESS
Fadillah, Rahmat Hidayat, S.Psi., M.Sc., Ph.D.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Barrick, M. R., & Ryan, M. R. (2003). Personality and Work Reconsidering the Role of Personality in Organizations. In *Jossey Bass*.

Barrick, M. R., Stewart, G. L., & Piotrowski, M. (2002). Personality and job performance: Test of the mediating effects of motivation among sales representatives. *Journal of Applied Psychology*, *87*(1). https://doi.org/10.1037/0021-9010.87.1.43

Bartram, D. (1987). The Development of an Automated Testing System for Pilot Selection: The MICROPAT Project1. *Applied Psychology*, *36*(3–4). https://doi.org/10.1111/j.1464-0597.1987.tb01192.x

Becker, K., & Parker, J. (2014). Methods of Design, an Overview of Game Design Techniques. In *Learning and Education Games: Vol. Volume One*.

Bellotti, F., Berta, R., De Gloria, A., & Ozolina, A. (2011). Investigating the added value of interactivity and serious gaming for educational TV. *Computers & Education*, *57*(1), 1137–1148. https://doi.org/https://doi.org/10.1016/j.compedu.2010.11.013

Bhatia, M. (2020). Game theory based framework of smart food quality assessment. *Transactions on Emerging Telecommunications Technologies*, *31*(12). https://doi.org/10.1002/ett.3926

Bipp, T., Wee, S., Walczok, M., & Hansal, L. (2024). The Relationship Between Game-Related Assessment and Traditional Measures of Cognitive Ability—A Meta-Analysis. *Journal of Intelligence*, *12*, 129. https://doi.org/10.3390/jintelligence12120129

Blanken, T., Dekker, K., & van Someren, E. (2018). How personality profile similarity can improve comparability between assessment formats: An example of the Mini-IPIP and IPIP-NEO-120 in a Dutch community sample. In *PsyArXiv*.

Borenstein, M., Hedges, L. V., Higgins, J. P. T., & Rothstein, H. R. (2021). Effect Sizes Based on Correlations. In *Introduction to Meta-Analysis*. https://doi.org/10.1002/9781119558378.ch6

Borenstein, M., Higgins, J. P. T., Hedges, L. V., & Rothstein, H. R. (2017). Basics of meta-analysis: I2 is not an absolute measure of heterogeneity. *Research Synthesis Methods*. https://doi.org/10.1002/jrsm.1230

Borenstein, M., Rothstein, H. R., Sutton, A. J., & Borenstein, M. (2005). Publication Bias in Meta-Analysis-Prevention. In *Assessment and Adjustments Edited PUBLICATION BIAS IN META-ANALYSIS*.

Borsboom, D. (2005). *Measuring the Mind*. Cambridge University Press.

Bowling, A. (2009). Research methods in health investigating health and health services. In *Public Health*.

UNIVERSITAS
GADJAH MADA
DARI TEORI KE PERMAINAN: MODEL PENGEMBANGAN DAN VALIDASI GAME-BASED ASSESSMENT CONSCIENTIOUSNESS
Fadillah, Rahmat Hidayat, S.Psi., M.Sc., Ph.D.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Braad, E., Žavcer, G., & Sandovar, A. (2016). Processes and models for serious game design and development. *Lecture Notes in Computer Science (Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, *9970 LNCS*. https://doi.org/10.1007/978-3-319-46152-6_5

Breien, F. S., & Wasson, B. (2021). Narrative categorization in digital game-based learning: Engagement, motivation & learning. *British Journal of Educational Technology*, *52*(1). https://doi.org/10.1111/bjet.13004

Brenner, P. S., & DeLamater, J. (2016). Lies, Damned Lies, and Survey Self-Reports? Identity as a Cause of Measurement Bias. *Social Psychology Quarterly*, *79*(4). https://doi.org/10.1177/0190272516628298

Brooke, J. (1996). *SUS -- a quick and dirty usability scale* (pp. 189–194).

Browne, K., Anand, C., & Gosse, E. (2014). Gamification and serious game approaches for adult literacy tablet software. *Entertainment Computing*, *5*(3), 135–146. https://doi.org/https://doi.org/10.1016/j.entcom.2014.04.003

Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin*, *56*(2). https://doi.org/10.1037/h0046016

Carrión-Toro, M., Santorum, M., Acosta-Vargas, P., Aguilar, J., & Pérez, M. (2020). iPlus a user-centered methodology for serious games design. *Applied Sciences (Switzerland)*, *10*(24). https://doi.org/10.3390/app10249007

Cassady, J. C., & Johnson, R. E. (2002). Cognitive test anxiety and academic performance. *Contemporary Educational Psychology*, *27*(2). https://doi.org/10.1006/ceps.2001.1094

Chen, Z. H., Chen, H. H. J., & Dai, W. J. (2018). Using narrative-based contextual games to enhance language learning: A case study. *Educational Technology and Society*, *21*(3).

Chung, G. K. W. K. (2015). Guidelines for the design and implementation of game telemetry for serious games analytics. In *Serious Games Analytics: Methodologies for Performance Measurement, Assessment, and Improvement*. https://doi.org/10.1007/978-3-319-05834-4_3

Collins, D. (2015). Cognitive Interviewing Practice. In *Cognitive Interviewing Practice*. https://doi.org/10.4135/9781473910102

Collmus, A. B., & Landers, R. N. (2019). Game-Framing to Improve Applicant Perceptions of Cognitive Assessments. *Journal of Personnel Psychology*, *18*(3). https://doi.org/10.1027/1866-5888/a000227

UNIVERSITAS
GADJAH MADA
DARI TEORI KE PERMAINAN: MODEL PENGEMBANGAN DAN VALIDASI GAME-BASED ASSESSMENT CONSCIENTIOUSNESS
Fadillah, Rahmat Hidayat, S.Psi., M.Sc., Ph.D.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Corti, K. (2006). Games-based Learning: a serious business application. *Informe de PixelLearning*, *34(6)*.

Crawford, C. (1984). The Art of Computer Game Design by Chris Crawford. *Computer*.

Cronbach, L. J., & Meehl, P. E. (1955). Construct validity in psychological tests. *Psychological Bulletin*, *52*(4). https://doi.org/10.1037/h0040957

Damnjanović, Đ., Stojić, D., Vujičić, D., & Milošević, M. (2024). *Minimalistic User Interface Design and Dark Mode Usage in Human-Computer Interaction*. https://doi.org/10.46793/TIE24.124D

De Klerk, S., & Kato, P. (2017). The Future Value of Serious Games for Assessment: Where Do We Go Now?. *Journal of Applied Testing Technology*, *18*.

Deltomme, B., Gorissen, K., & Weijters, B. (2023). Measuring Pro-Environmental Behavior: Convergent Validity, Internal Consistency, and Respondent Experience of Existing Instruments. *Sustainability (Switzerland)*, *15*(19). https://doi.org/10.3390/su151914484

Deterding, S., Khaled, R., Nacke, L., & Dixon, D. (2011). Gamification: toward a definition. *Chi 2011*.

DeVellis, R. F. (2006). Classical test theory. *Medical Care*, *44*(11 SUPPL. 3). https://doi.org/10.1097/01.mlr.0000245426.10853.30

Di Cerbo, K. E., Bertling, M., Stephenson, S., Jia, Y., Mislevy, R. J., Bauer, M., & Jackson, G. T. (2015). An application of exploratory data analysis in the development of game-based assessments. In *Serious Games Analytics: Methodologies for Performance Measurement, Assessment, and Improvement*. https://doi.org/10.1007/978-3-319-05834-4_14

Djaouti, D., Alvarez, J., Jessel, J.-P., & Rampnoux, O. (2011). Origins of Serious Games. In *Serious Games and Edutainment Applications*. https://doi.org/10.1007/978-1-4471-2161-9_3

Doukianou, S., Petridis, P., Dunwell, I., & Cooper, J. (2014). A usability evaluation of game-based approaches assessing risk and delayed gratification. In M. M., D. A., & C. V. (Eds.), *6th International Conference on Virtual Worlds and Games for Serious Applications, VS-Games 2014*. Institute of Electrical and Electronics Engineers Inc. https://doi.org/10.1109/VS-Games.2014.7012028

DuVernet, A. M., & Popp, E. (2014). Gamification of Workplace Practices. *TIP: The Industrial-Organizational Psychologist*, *52*(1).

UNIVERSITAS
GADJAH MADA
DARI TEORI KE PERMAINAN: MODEL PENGEMBANGAN DAN VALIDASI GAME-BASED ASSESSMENT CONSCIENTIOUSNESS
Fadillah, Rahmat Hidayat, S.Psi., M.Sc., Ph.D.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Eissa, G. (2020). Individual initiative and burnout as antecedents of employee expediency and the moderating role of *conscientiousness*. *Journal of Business Research*, *110*. https://doi.org/10.1016/j.jbusres.2019.12.047

El Othman, R., El Othman, R., Hallit, R., Obeid, S., & Hallit, S. (2020). Personality traits, emotional intelligence and decision-making styles in Lebanese universities medical students. *BMC Psychology*, *8*(1). https://doi.org/10.1186/s40359-020-00406-4

Farr, J. L., & Tippins, N. T. (2013). Handbook of employee selection an introduction and overview. In *Handbook of Employee Selection*. https://doi.org/10.4324/9780203809808

Fetzer, M., Mcnamara, J., & Geimer, J. L. (2017). Gamification, Serious Games and Personnel Selection. In *The Wiley Blackwell Handbook of the Psychology of Recruitment, Selection and Employee Retention*. https://doi.org/10.1002/9781118972472.ch14

Field, A. P. (2001). Meta-analysis of correlation coefficients: A Monte Carlo comparison of fixed- and random-effects methods. *Psychological Methods*. https://doi.org/10.1037/1082-989X.6.2.161

Formica, E., Gaiffi, E., Magnani, M., Mancini, A., Scatolini, E., & Ulivier, M. (2017). Can video games be an innovative tool to assess personality traits of the millennial generation? An exploratory research. *BPA Applied Psychology Bulletin*, *65*(280).

Friedrich, J., Becker, M., Kramer, F., Wirth, M., & Schneider, M. (2020). Incentive design and gamification for knowledge management. *Journal of Business Research*, *106*, 341–352. https://doi.org/10.1016/j.jbusres.2019.02.009

Funder, D. C., & Ozer, D. J. (2019). Evaluating Effect Size in Psychological Research: Sense and Nonsense. *Advances in Methods and Practices in Psychological Science*. https://doi.org/10.1177/2515245919847202

Georgiadis, K., van Lankveld, G., Bahreini, K., & Westera, W. (2019). Reinforcing stealth assessment in serious games. In L. A., Y. G.N., G. M., & N. M. (Eds.), *8th International Conference on Games and Learning Alliance, GALA 2019: Vol. 11899 LNCS* (pp. 512–521). Springer. https://doi.org/10.1007/978-3-030-34350-7_49

Georgiou, K., Gouras, A., & Nikolaou, I. (2019). Gamification in employee selection: The development of a gamified assessment. *International Journal of Selection and Assessment*, *27*(2). https://doi.org/10.1111/ijsa.12240

Giglioli, I. A. C., Carrasco-Ribelles, L. A., Parra, E., Marín-Morales, J., & Raya, M. A. (2021). An immersive serious game for the behavioral assessment of psychological needs. *Applied Sciences (Switzerland)*, *11*(4), 1–17. https://doi.org/10.3390/app11041971

UNIVERSITAS
GADJAH MADA
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Fadillah, Rahmat Hidayat, S.Psi., M.Sc., Ph.D.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Goldberg, L. R. (1992). The Development of Markers for the Big-Five Factor Structure. *Psychological Assessment*. https://doi.org/10.1037/1040-3590.4.1.26

Harman, J. L., & Purl, J. (2022). Advances in Game-Like Personality Assessment. *Trends in Psychology*. https://doi.org/10.1007/s43076-022-00162-x

Hartmann, S., Güzel, E., & Gschwendtner, T. (2023). Digital measurement of hands-on performance? Ecological validation of a computer-based assessment of automotive repair skills. *Empirical Research in Vocational Education and Training*, *15*(1). https://doi.org/10.1186/s40461-023-00153-x

Hassan, L. (2024). Accessibility of games and game-based applications: A systematic literature review and mapping of future directions. In *New Media and Society* (Vol. 26, Issue 4). https://doi.org/10.1177/14614448231204020

Hellwig, S., & Schulze, R. (2023). Differential Relations between Facets of Agreeableness and Ability-Based Measures of Strategic Emotional Intelligence. *Journal of Individual Differences*, *44*(2). https://doi.org/10.1027/1614-0001/a000388

Hidayat, R. (2018). Game-Based Learning: Academic Games sebagai Metode Penunjang Pembelajaran Kewirausahaan. *Buletin Psikologi*, *26*(2). https://doi.org/10.22146/buletinpsikologi.30988

Hilliard, A., Kazim, E., Bitsakis, T., & Leutner, F. (2022). Measuring Personality through Images: Validating a Forced-Choice Image-Based Assessment of the Big Five Personality Traits. *Journal of Intelligence*, *10*(1). https://doi.org/10.3390/jintelligence10010012

Hogan, J., Barrett, P., & Hogan, R. (2007). Personality Measurement, Faking, and Employment Selection. *Journal of Applied Psychology*, *92*(5). https://doi.org/10.1037/0021-9010.92.5.1270

Hogan, J., & Ones, D. S. (1997). *Conscientiousness* and Integrity at Work. In *Handbook of Personality Psychology*. https://doi.org/10.1016/b978-012134645-4/50033-0

Huang, J. L., Cropanzano, R., Li, A., Shao, P., Zhang, X. an, & Li, Y. (2017). Employee *conscientiousness*, agreeableness, and supervisor justice rule compliance: A three-study investigation. *Journal of Applied Psychology*, *102*(11). https://doi.org/10.1037/apl0000248

Hunicke, R., Leblanc, M., & Zubek, R. (2004). MDA: A formal approach to game design and game research. *AAAI Workshop - Technical Report*, *WS-04-04*.

Hurtz, G. M., & Donovan, J. J. (2000). Personality and job performance: The big five revisited. In *Journal of Applied Psychology* (Vol. 85, Issue 6). https://doi.org/10.1037/0021-9010.85.6.869

UNIVERSITAS
GADJAH MADA
DARI TEORI KE PERMAINAN: MODEL PENGEMBANGAN DAN VALIDASI GAME-BASED ASSESSMENT CONSCIENTIOUSNESS
Fadillah, Rahmat Hidayat, S.Psi., M.Sc., Ph.D.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Ifenthaler, D., & Yau, J. Y. K. (2020). Utilising learning analytics to support study success in higher education: a systematic review. *Educational Technology Research and Development*, *68*(4). https://doi.org/10.1007/s11423-020-09788-z

Johnson, J. A. (2011). Development of a short-form of the IPIP-NEO personality inventory. *Meeting of the Association for Research in Personality*.

Jones, S. M. W., Briant, K. J., Corona, C., & Mendoza, J. A. (2023). Feasibility and Validity of Using Item Response Theory to Assess Cumulative Social Risk. *Social Indicators Research*, *169*(3). https://doi.org/10.1007/s11205-023-03189-4

Judge, T. A., Piccolo, R. F., & Kosalka, T. (2009). The bright and dark sides of leader traits: A review and theoretical extension of the leader trait paradigm. *Leadership Quarterly*, *20*(6). https://doi.org/10.1016/j.leaqua.2009.09.004

Juul, J. (2005). Half-real: Video games between real rules and fictional worlds. In *MIT Press*.

Kapp, K. M. (2012). The Gamification of Learning and Instruction: Game-based Methods and ... - Karl M. Kapp - Google Books. In *The Gamification of Learning and Instruction*.

Kelley, D., & Brown, T. (2020). An Introduction to Design Thinking Process Guide. *Institute of Design at Stanford*.

Khaleghi, A., Aghaei, Z., & Mahdavi, M. A. (2020). Gamification Framework for Cognitive Assessment and Cognitive Training: Qualitative Study (Preprint). *JMIR Serious Games*. https://doi.org/10.2196/21900

Khaleghi, A., Aghaei, Z., & Mahdavi, M. A. (2021). A gamification framework for cognitive assessment and cognitive training: Qualitative study. *JMIR Serious Games*, *9*(2). https://doi.org/10.2196/21900

Kim, Y. J., & Ifenthaler, D. (2019). *Game-Based Assessment: The Past Ten Years and Moving Forward*. https://doi.org/10.1007/978-3-030-15569-8_1

Kim, Y. J., & Shute, V. J. (2015). The interplay of game elements with psychometric qualities, learning, and enjoyment in game-based assessment. *Computers & Education*, *87*, 340–356. https://doi.org/https://doi.org/10.1016/j.compedu.2015.07.009

Krasulak, M. (2015). Use of gamification in the process of selection of candidates for the position in the opinion of young adults in Poland. *Jagiellonian Journal of Management*, *1*(3). https://doi.org/10.4467/2450114XJJM.15.015.4472

Landers, R. N., Auer, E. M., Collmus, A. B., & Armstrong, M. B. (2018). Gamification Science, Its History and Future: Definitions and a Research Agenda. *Simulation and Gaming*, *49*(3). https://doi.org/10.1177/1046878118774385

UNIVERSITAS
GADJAH MADA
DARI TEORI KE PERMAINAN: MODEL PENGEMBANGAN DAN VALIDASI GAME-BASED ASSESSMENT CONSCIENTIOUSNESS
Fadillah, Rahmat Hidayat, S.Psi., M.Sc., Ph.D.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Landers, R. N., Bauer, K. N., Callan, R. C., & Armstrong, M. B. (2015). Psychological theory and the gamification of learning. In *Gamification in Education and Business*. https://doi.org/10.1007/978-3-319-10208-5_9

Landers, R. N., & Collmus, A. B. (2022). Gamifying a personality measure by converting it into a story: Convergence, incremental prediction, faking, and reactions. *International Journal of Selection and Assessment*, *30*(1). https://doi.org/10.1111/ijsa.12373

Landers, R. N., & Sanchez, D. R. (2022). Game-based, gamified, and gamefully designed assessments for employee selection: Definitions, distinctions, design, and validation. *International Journal of Selection and Assessment*, *30*(1), 1–13. https://doi.org/10.1111/ijsa.12376

Lee, C.-I., Chen, I.-P., Hsieh, C.-M., & Liao, C.-N. (2017). Design Aspects of Scoring Systems in Game. *Art and Design Review*, *05*(01). https://doi.org/10.4236/adr.2017.51003

Leutner, F., Codreanu, S.-C., Brink, S., & Bitsakis, T. (2023). Game based assessment of cognitive ability in recruitment: Validity, fairness and test-taking experience. *Front. Psychol. 13:942662.* https://doi.org/doi: 10.3389/fpsyg.2022.942662

Leutner, F., Codreanu, S.-C., Liff, J., & Mondragon, N. (2021). The potential of game- and video-based assessments for social attributes: examples from practice. *Journal of Managerial Psychology*, *36*(7), 533–547. https://doi.org/10.1108/JMP-01-2020-0023

Levy, R. (2019). Dynamic Bayesian Network Modeling of Game-Based Diagnostic Assessments. *Multivariate Behavioral Research*, *54*(6). https://doi.org/10.1080/00273171.2019.1590794

Lievens, F., & Sackett, P. R. (2006). Video-based versus written situational judgment tests: A comparison in terms of predictive validity. *Journal of Applied Psychology*. https://doi.org/10.1037/0021-9010.91.5.1181

Lievens, F., & Sackett, P. R. (2007). Situational judgment tests in high-stakes settings: Issues and strategies with generating alternate forms. In *Journal of Applied Psychology* (Vol. 92, pp. 1043–1055). American Psychological Association. https://doi.org/10.1037/0021-9010.92.4.1043

Lin, Y., & Liu, H. (2024). The Impact of Artificial Intelligence Generated Content Driven Graphic Design Tools on Creative Thinking of Designers. In *Lecture Notes in Computer Science* (Vol. 14702). Springer.

UNIVERSITAS
GADJAH MADA
DARI TEORI KE PERMAINAN: MODEL PENGEMBANGAN DAN VALIDASI GAME-BASED ASSESSMENT CONSCIENTIOUSNESS
Fadillah, Rahmat Hidayat, S.Psi., M.Sc., Ph.D.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Marfisi-Schottman, I., George, S., & Tarpin-Bernard, F. (2010). Tools and methods for efficiently designing serious games. *4th European Conference on Games Based Learning 2010, ECGBL 2010*.

Mayer, J. D., & Bryan, V. M. (2024). On Personality Measures and Their Data: A Classification of Measurement Approaches and Their Recommended Uses. *Personality and Social Psychology Review*, *28*(3). https://doi.org/10.1177/10888683231222519

McChesney, J., Campbell, C., Wang, J., & Foster, L. (2022). What is in a name? Effects of game-framing on perceptions of hiring organizations. *International Journal of Selection and Assessment*, *30*(1). https://doi.org/10.1111/ijsa.12370

McCord, J. L., Harman, J. L., & Purl, J. (2019). Game-like personality testing: An emerging mode of personality assessment. *Personality and Individual Differences*, *143*. https://doi.org/10.1016/j.paid.2019.02.017

McCrae, R. R., & Costa, P. T. (1987). Validation of the Five-Factor Model of Personality Across Instruments and Observers. *Journal of Personality and Social Psychology*. https://doi.org/10.1037/0022-3514.52.1.81

McCrae, R. R., & Costa, P. T. (1997). Personality Trait Structure as a Human Universal. *American Psychologist*. https://doi.org/10.1037/0003-066X.52.5.509

McDaniel, M. A., & Nguyen, N. T. (2001). Situational Judgment Tests: A Review of Practice and Constructs Assessed. In *International Journal of Selection and Assessment*. https://doi.org/10.1111/1468-2389.00167

McDonald, J. D. (2008). Measuring personality constructs: The advantages and disadvantages of self-reports, informant reports and behavioural assessments. *Enquire*, *1*(1).

McFarland, G. K., Polit, D. F., & Hungler, B. P. (1987). Nursing Research: Principles and Methods. *The American Journal of Nursing*, *87*(11). https://doi.org/10.2307/3425916

McHenry, J. J., Hough, L. M., Toquam, J. L., Hanson, M. A., & Ashworth, S. (1990). Project a validity results : The relationship between predictor and criterion domains. *Personnel Psychology*, *43*(2). https://doi.org/10.1111/j.1744-6570.1990.tb01562.x

Messick, S. (1989). Validity of Psychological Assessment. *American Psychologist*, *50*(9).

Mislevy, R. J. (2013). Evidence-centered design for simulation-based assessment. In *Military medicine* (Vol. 178, Issue 10 Suppl). https://doi.org/10.7205/milmed-d-13-00213

UNIVERSITAS
GADJAH MADA
DARI TEORI KE PERMAINAN: MODEL PENGEMBANGAN DAN VALIDASI GAME-BASED ASSESSMENT CONSCIENTIOUSNESS
Fadillah, Rahmat Hidayat, S.Psi., M.Sc., Ph.D.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Mislevy, R. J., Winters, F. I., Bejar, I. I., Bennett, R. E., & Haertel, G. D. (2010). Technology supports for assessment design. In *International Encyclopedia of Education*. https://doi.org/10.1016/B978-0-08-044894-7.00703-X

Morgado, F. F. R., Meireles, J. F. F., Neves, C. M., Amaral, A. C. S., & Ferreira, M. E. C. (2017). Scale development: Ten main limitations and recommendations to improve future research practices. *Psicologia: Reflexao e Critica*, *30*(1). https://doi.org/10.1186/s41155-016-0057-1

Motowidlo, S. J., & Beier, M. E. (2010). Differentiating Specific Job Knowledge From Implicit Trait Policies in Procedural Knowledge Measured by a Situational Judgment Test. *Journal of Applied Psychology*, *95*(2). https://doi.org/10.1037/a0017975

Motowidlo, S. J., Hooper, A. C., & Jackson, H. L. (2006). Implicit policies about relations between personality traits and behavioral effectiveness in situational judgment items. *Journal of Applied Psychology*, *91*(4). https://doi.org/10.1037/0021-9010.91.4.749

Mount, M. K., Barrick, M. R., & Strauss, J. P. (1999). The joint relationship of *conscientiousness* and ability with performance: Test of the interaction hypothesis. *Journal of Management*, *25*(5). https://doi.org/10.1177/014920639902500505

Murchie, K. J., & Diomede, D. (2020). Fundamentals of graphic Design-essential tools for effective visual science communication. In *Facets* (Vol. 5, Issue 1). https://doi.org/10.1139/FACETS-2018-0049

Murphy, K. R., & Dzieweczynski, J. L. (2005). Why don't measures of broad dimensions of personality perform better as predictors of job performance? *Human Performance*, *18*(4). https://doi.org/10.1207/s15327043hup1804_2

Myers, C. E., Kostek, J. A., Ekeh, B., Sanchez, R., Ebanks-Williams, Y., Krusznis, A. L., Weinflash, N., & Servatius, R. J. (2016). Watch what I do, not what I say I do: Computer-based avatars to assess behavioral inhibition, a vulnerability factor for anxiety disorders. *Computers in Human Behavior*, *55*. https://doi.org/10.1016/j.chb.2015.07.067

Naeem, F. (2023). A Critical Analysis of Big Five Personality Theory. *International Journal of Advance Research and Innovation*, *11*(1), 83–88.

Naul, E., & Liu, M. (2020). Why Story Matters: A Review of Narrative in Serious Games. *Journal of Educational Computing Research*, *58*(3). https://doi.org/10.1177/0735633119859904

Nikolaou, I., Georgiou, K., & Kotsasarlidou, V. (2019). Exploring the Relationship of a Gamified Assessment with Performance. *Spanish Journal of Psychology*. https://doi.org/10.1017/sjp.2019.5

UNIVERSITAS
GADJAH MADA
DARI TEORI KE PERMAINAN: MODEL PENGEMBANGAN DAN VALIDASI GAME-BASED ASSESSMENT CONSCIENTIOUSNESS
Fadillah, Rahmat Hidayat, S.Psi., M.Sc., Ph.D.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Nunnally, J., & Bernstein, I. (1994). Psychometric Theory, 3rd edn, 1994. *McGraw-Hill, New York*, *3*.

Ogasawara, H. (2009). Stratified Coefficients of Reliability and Their Sampling Behavior Under Nonnormality. *Behaviormetrika*, *36*(1). https://doi.org/10.2333/bhmk.36.49

Ogunsakin, I. B., & Shogbesan, Y. O. (2018). Item response theory (IRT): A modern statistical theory for solving measurement problem in 21st century. *International Journal of Scientific Research in Education*, *11*(3B).

Oluwatayo, J. A. (2012). Validity and Reliability Issues in Educational Research. *Journal of Educational and Social Research*, *2*(May).

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., … Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. In *The BMJ*. https://doi.org/10.1136/bmj.n71

Palhano, D. B., Dos Machado, L. S., & De Almeida, A. A. F. (2020). Paki Mirabolandia: A Serious Game to Identify Player Personality. In R. N., S. R., D. N., V. J.L., Q. K., O. E., & D. D. (Eds.), *8th IEEE International Conference on Serious Games and Applications for Health, SeGAH 2020*. Institute of Electrical and Electronics Engineers Inc. https://doi.org/10.1109/SeGAH49190.2020.9201759

Polit, D. F., & Beck, C. T. (2014). Nursing Research: Principles and Methods - Denise F. Polit, Cheryl Tatano Beck - Google Books. In *Nursing research: Principles and methods*.

Ramos-Villagrasa, P. J., & Fernández-Del-Río, E. (2023). Predictive Validity, Applicant Reactions, and Influence of Personal Characteristics of a Gamefully Designed Assessment. *Revista de Psicologia Del Trabajo y de Las Organizaciones*, *39*(3). https://doi.org/10.5093/JWOP2023A18

Ramos-Villagrasa, P. J., Fernández-del-Río, E., Hermoso, R., & Cebrián, J. (2024). Are serious games an alternative to traditional personality questionnaires? Initial analysis of a gamified assessment. *PLOS ONE*, *19*(5), e0302429. https://doi.org/10.1371/journal.pone.0302429

Ranieri, M., Raffaghelli, J. E., & Bruni, I. (2021). Game-based student response system: Revisiting its potentials and criticalities in large-size classes. *Active Learning in Higher Education*, *22*(2). https://doi.org/10.1177/1469787418812667

UNIVERSITAS
GADJAH MADA
DARI TEORI KE PERMAINAN: MODEL PENGEMBANGAN DAN VALIDASI GAME-BASED ASSESSMENT CONSCIENTIOUSNESS
Fadillah, Rahmat Hidayat, S.Psi., M.Sc., Ph.D.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Raykov, T. (2011). Evaluation of convergent and discriminant validity with multitrait–multimethod correlations. *British Journal of Mathematical and Statistical Psychology*, *64*(1), 38–52. https://doi.org/10.1348/000711009X478616

Renner, W. (2002). A psychometric analysis of the NEO five-factor inventory in an Austrian sample. In *Review of Psychology* (Vol. 9, Issues 1–2).

Roberts, B. W., Lejuez, C., Krueger, R. F., Richards, J. M., & Hill, P. L. (2014). What is *conscientiousness* and how can it be assessed? *Developmental Psychology*, *50*(5). https://doi.org/10.1037/a0031109

Rothstein, H. R., Sutton, A. J., & Borenstein, M. (2006). Publication bias in meta-analysis. *Publication Bias in Meta-Analysis: Prevention, Assessment and Adjustments*, 1–7. https://doi.org/10.1002/0470870168.ch1

Ruhi, U. (2015). Level Up Your Strategy: Towards a Descriptive Framework for Meaningful Enterprise Gamification. *Technology Innovation Management Review*, *5*(8). https://doi.org/10.22215/timreview/918

Ryan, A. M., & Derous, E. (2019). The unrealized potential of technology in selection assessment. *Revista de Psicologia Del Trabajo y de Las Organizaciones*, *35*(2). https://doi.org/10.5093/jwop2019a10

Saavedra, A. B., Álvarez Rodríguez, F. J., Arteaga, J. M., & Oviedo de Luna, A. C. (2016). Process for Modeling Competencies for Developing Serious Games. *Revista Electronica de Investigacion Educativa*, *18*(3).

Samčović, A. (2018). Serious games in military applications. *Vojnotehnicki Glasnik*, *66*(3). https://doi.org/10.5937/vojtehg66-16367

Santos, C. P., Hutchinson, K., Khan, V. J., & Markopoulos, P. (2019). Profiling personality traits with games. *ACM Transactions on Interactive Intelligent Systems*, *9*(2–3). https://doi.org/10.1145/3230738

Santoso, A. (2010). Validitas: Dulu dan Sekarang. In A. Supratiknya & T. Susana (Eds.), *Bunga Rampai Lima puluh tahun Himpunan Psikologi Indonesia (HIMPSI)* (1st ed.). Himpunan Psikologi Indonesia.

Santoso, A., Savira, A. W., & Prihatmoko, R. L. E. (2023). *Validity evidence based on content: Controversies and quantification*. https://doi.org/10.37517/978-1-74286-697-0-01

Sauro, J. (2011). *A Practical Guide to the System Usability Scale: Background, Benchmarks & Best Practices*. Measuring Usability LLC. https://books.google.co.id/books?id=BL0kKQEACAAJSawyer, B. (2004). The serious games summit. *Computers in Entertainment*, *2*(1). https://doi.org/10.1145/973801.973811

UNIVERSITAS
GADJAH MADA
DARI TEORI KE PERMAINAN: MODEL PENGEMBANGAN DAN VALIDASI GAME-BASED ASSESSMENT CONSCIENTIOUSNESS
Fadillah, Rahmat Hidayat, S.Psi., M.Sc., Ph.D.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Sawyer, B., & Rejeski, D. (2002). *Serious games: Improving public policy through game-based learning and simulation*.

Schmidt, F. L., & Hunter, J. E. (2015). *Methods of Meta-Analysis: Correcting Error and Bias in Research Findings*. SAGE Publications, Ltd. https://doi.org/10.4135/9781483398105

Schrage, M. (1999). *Serious play: how the world's best companies simulate to innovate*. Harvard Business School Press. https://doi.org/10.5860/choice.37-5189

Schrepp, M., Hinderks, A., & Thomaschewski, J. (2017). Design and Evaluation of a Short Version of the User Experience Questionnaire (UEQ-S). *International Journal of Interactive Multimedia and Artificial Intelligence*, *4*, 103. https://doi.org/10.9781/ijimai.2017.09.001

Shelby, L. B., & Vaske, J. (2008). Understanding meta-analysis: A review of the methodological literature. In *Leisure Sciences* (Vol. 30, Issue 2). https://doi.org/10.1080/01490400701881366

Shute, V. J., & Rahimi, S. (2017). Review of computer-based assessment for learning in elementary and secondary education. In *Journal of Computer Assisted Learning* (Vol. 33, Issue 1). https://doi.org/10.1111/jcal.12172

Shute, V. J., & Rahimi, S. (2021). Stealth assessment of creativity in a physics video game. *Computers in Human Behavior*, *116*. https://doi.org/10.1016/j.chb.2020.106647

Shute, V. J., Wang, L., Greiff, S., Zhao, W., & Moore, G. (2016). Measuring problem solving skills via stealth assessment in an engaging video game. *Computers in Human Behavior*, *63*, 106–117. https://doi.org/https://doi.org/10.1016/j.chb.2016.05.047

Simons, A., Wohlgenannt, I., Weinmann, M., & Fleischer, S. (2021). Good gamers, good managers? A proof-of-concept study with Sid Meier's Civilization. *Review of Managerial Science*, *15*(4). https://doi.org/10.1007/s11846-020-00378-0

Squire, N. (2023). Undergraduate Game-Based Student Response Systems (SRSs): A Systematic Review. *Technology, Knowledge and Learning*, *28*(4). https://doi.org/10.1007/s10758-023-09655-9

Stenros, J. (2017). The Game Definition Game: A Review. *Games and Culture*, *12*(6). https://doi.org/10.1177/1555412016655679

Su, C.-H., & Cheng, C.-H. (2013). A Mobile Game-based Insect Learning System for Improving the Learning Achievements. *Procedia - Social and Behavioral Sciences*, *103*, 42–50. https://doi.org/https://doi.org/10.1016/j.sbspro.2013.10.305

UNIVERSITAS
GADJAH MADA
DARI TEORI KE PERMAINAN: MODEL PENGEMBANGAN DAN VALIDASI GAME-BASED ASSESSMENT CONSCIENTIOUSNESS
Fadillah, Rahmat Hidayat, S.Psi., M.Sc., Ph.D.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Sweller, J. (1988). Cognitive load during problem solving: Effects on learning. *Cognitive Science*, *12*(2), 257–285. https://doi.org/https://doi.org/10.1016/0364-0213(88)90023-7

Szabo, D. A. (2022). Adapting the Addie Instructional Design Model in Online Education. *Studia Universitatis Babeș-Bolyai Psychologia-Paedagogia*, *67*(1). https://doi.org/10.24193/subbpsyped.2022.1.08

Tarigan, M., & Fadillah. (2024). THE VALIDITY AND RELIABILITY OF THE INDONESIAN IPIP-NEO-120. *TPM - Testing, Psychometrics, Methodology in Applied Psychology*, *31*(1). https://doi.org/10.4473/TPM31.1.7

Tekinbas, K. S., & Zimmerman, E. (2003). Rules of Play: Game Design Fundamentals. In *MIT Press*.

Tett, R. P., Jackson, D. N., & Rothstein, M. (1991). PERSONALITY MEASURES AS PREDICTORS OF JOB PERFORMANCE: A META-ANALYTIC REVIEW. *Personnel Psychology*, *44*(4). https://doi.org/10.1111/j.1744-6570.1991.tb00696.x

Triantoro, T., Gopal, R., Benbunan-Fich, R., & Lang, G. (2019). Would you like to play? A comparison of a gamified survey with a traditional online survey method. *International Journal of Information Management*, *49*, 242–252. https://doi.org/https://doi.org/10.1016/j.ijinfomgt.2019.06.001

Tucker, E. (2020). Driving engagement with the employee experience. *Strategic HR Review*, *19*(4). https://doi.org/10.1108/shr-03-2020-0023

Udeozor, C., Abegão, F. R., & Glassey, J. (2024). Measuring learning in digital games: Applying a game-based assessment framework. *British Journal of Educational Technology*, *55*(3). https://doi.org/10.1111/bjet.13407

Valdenegro-Toro, M. (2022). *Exploring the Limits of Epistemic Uncertainty Quantification in Low-Shot Settings*. https://doi.org/10.52591/202112073

Valentine, J. C., DuBois, D. L., & Cooper, H. (2004). The Relation Between Self-Beliefs and Academic Achievement: A Meta-Analytic Review. *Educational Psychologist*, *39*(2), 111–133. https://doi.org/10.1207/s15326985ep3902_3

Ventura, M., & Shute, V. (2013). The validity of a game-based assessment of persistence. *Computers in Human Behavior*, *29*(6), 2568–2572. https://doi.org/https://doi.org/10.1016/j.chb.2013.06.033

Weiner, E. J., & Sanchez, D. R. (2020). Cognitive ability in virtual reality: Validity evidence for VR game-based assessments. *International Journal of Selection and Assessment*, *28*(3). https://doi.org/10.1111/ijsa.12295

UNIVERSITAS
GADJAH MADA
DARI TEORI KE PERMAINAN: MODEL PENGEMBANGAN DAN VALIDASI GAME-BASED ASSESSMENT CONSCIENTIOUSNESS
Fadillah, Rahmat Hidayat, S.Psi., M.Sc., Ph.D.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Werbach, K., & Hunter, D. (2023). Level 5 Game Changer: Six Steps to Gamification. In *For the Win, Revised and Updated Edition*. https://doi.org/10.9783/9781613631041-006

Westera, W. (2019). Why and How Serious Games can Become Far More Effective. *Journal of Educational Technology & Society*, *22*(1).

Whiston, S. C. (2005). Principles and applications of assessment in counseling (2nd ed.). In *Principles and applications of assessment in counseling (2nd ed.).*

Willink, R. (2010). On the validity of methods of uncertainty evaluation. *Metrologia*, *47*(1), 80–89. https://doi.org/10.1088/0026-1394/47/1/009

Winn, B. (2008). The Design, Play, and Experience Framework. *Handbook of Research on Effective Electronic Gaming in Education,* 1010–1024.

Wu, F. Y., Mulfinger, E., Alexander III, L., Sinclair, A. L., McCloy, R. A., & Oswald, F. L. (2022). Individual differences at play: An investigation into measuring Big Five personality facets with game-based assessments. *International Journal of Selection and Assessment*, *30*(1), 62–81. https://doi.org/10.1111/ijsa.12360

Zhu, S., Guo, Q., & Yang, H. H. (2023). Beyond the Traditional: A Systematic Review of Digital Game-Based Assessment for Students' Knowledge, Skills, and Affections. In *Sustainability (Switzerland)* (Vol. 15, Issue 5). https://doi.org/10.3390/su15054693