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Artificial Intelligence for Gaming Accessibility: A Comparative Analysis of Current Advances, User Perspectives, and Future Directions

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Abstract — Artificial intelligence (AI) is frequently suggested as a means to reduce the participation thresholds that presently inhibit gamers with disabilities from playing digital games. However, evidence to support this assertion has been scattered across academic literature, open datasets, industry standards, and practitioner discourse and seldom consolidated. This review brings together and compares the four kinds of evidence, not to develop new theoretical concepts or to present new experimental data, but to emphasize the areas of agreement and disagreement in the literature. Following the PRISMA 2020 methodology, a repeatable search and filtering pipeline was developed, covering IEEE Xplore, the ACM Digital Library, Scopus, Web of Science, and Google Scholar, for the period 2018-February 2026, further enriched by a qualitative evidence synthesis of open accessibility resources: large-scale Steam review datasets, the Game Accessibility Guidelines (GaG), the IncluSet repository, and AbleGamers Accessible Player Experiences (APX), and a comparative analysis of academic research results against player signals and practitioner recommendations. Analysis of this corpus reveals recurrent themes, with advanced AI applications being largely limited to speech-to-text captioning, text-to-speech audio, computer vision for navigation and object recognition, and reinforcement learning for adaptive difficulty. Cutting-edge yet less-explored solutions involve large language models and other forms of generative AI. There is considerable agreement between literature, expressed user interest, and practitioner recommendations regarding captioning, data privacy in adaptive accessibility systems, and multiplayer game balance. Still more research on making games accessible to players with disabilities is focused on visual and hearing impairments than on motor or cognitive disabilities. Together, these point to opportunities for an integrated agenda that prioritizes disability-balanced training data, ecologically valid evaluation of gaming accessibility, and participatory AI design approaches centered on user privacy.

Keywords— Artificial Intelligence, Gaming Accessibility, Inclusive Game Design, Disability, Evidence Synthesis, Machine Learning, Assistive Technology, PRISMA, Natural Language Processing (NLP).

I. INTRODUCTION

Digital games have evolved into a leading cultural and economic medium, yet universal playability is still out of reach. Many gamers experience difficulties with text that is hard to read, audio without subtitles, and control schemes that demand fast, bimanual, high-precision movements. Initial work on game accessibility treated it as a game design issue, enumerating challenges grouped by sensory, motor, and cognitive disabilities with suggestions on how to supplement, substitute, or improve game stimuli and inputs [1]. Nearly a decade of dedicated research has helped establish that while awareness is improving, truly playable games remain rare in commercial contexts due to fragmented practices and limited developer awareness [2].

A recent review of the field indicates a strong focus on games for learning and health outcomes, rather than accessibility for fun and enjoyment [3]. Meanwhile, game AI has transitioned from deterministic hard-coded behaviour of non-player-characters to data-driven frameworks such as automatic speech recognition, computer vision, natural language processing, reinforcement learning, and the recent advent of large language models (LLMs) and generative AI. These capabilities present a strong case for accessibility applications because rather than choosing generic options that attempt to fit all players, these approaches can learn and adapt to an individual player's abilities at runtime. Industry-led organizations have started to surface this potential, treating features like captioning/remapping / color customization as table stakes rather than luxury features [4]. Design knowledge pushed by advocates such as AbleGamers Accessible Player Experiences (APX) takes a similar approach, focusing on removing common barriers to access and challenge rather than designing for each diagnosis [5]. Nevertheless, each evidence stream remains isolated: peer-reviewed publications tend to study only one technique with small convenience samples; public datasets record whatever large groups of players vocally complain about or collectively value; practitioner-facing resources tend to crystallize hard-earned but often informally validated design heuristics. Taken together, analysis across streams can illuminate where AI is genuinely helpful, where practitioners and users may prioritize differently than researchers, and what disabilities are being left behind. For this reason, novelty in our work is integrative. Our review does not introduce a novel model or prototype. Instead, it contrasts academic publications, public accessibility datasets, and practitioner-facing resources according to a common set of criteria within a single analysis.

Consequently, our results are presented across four categories, guided by our research questions. RQ1: What AI techniques are applied towards gaming accessibility? RQ2: What accessibility aspects do these AI techniques aim to address? RQ3: How do public datasets and practitioner resources align with trends in academic literature? RQ4: What gaps remain and what opportunities can be identified for future work? Our contributions are as follows: a PRISMA-inspired, reproducible synthesis protocol conducted across three bodies of evidence; quantitative and qualitative comparisons of AI techniques, accessibility features, and types of disability addressed; and a synthesized agenda that identifies points of convergence as well as debate or gaps in the literature. The remainder of this paper is organized as follows. We first describe our methodology for conducting a comparative synthesis of work on AI for accessibility. Then, we present our three primary bodies of work: AI for accessibility, our dataset of datasets, and our integrated comparative synthesis. Finally, we discuss our findings and suggest future opportunities before concluding.

II. METHODOLOGY

This review is a hybrid evidence synthesis that includes a systematic literature review (SLR) conducted and reported following the PRISMA 2020 guideline, and a qualitative evidence synthesis; publicly available resources were searched and collected for assessment and contrast with practitioner guidance [6]. PRISMA was chosen due to its transparency and reproducibility goals. The PRISMA checklist [included/inherits this thorough] is commonly used in software and accessibility research. See Figure 1 for study-selection flow.

Search Strategy

The primary sources for our research comprised IEEE Xplore, the ACM Digital Library, Scopus, Web of Science, and Google Scholar. Articles published from 2018 to 2026 were included to allow for retrieval of newer works in this rapidly expanding field of deep-learning and LLM-based work as well as foundational works where applicable. Boolean search strings consisted of an accessibility concept block appended to an AI-technique block (see Table 1). Our systematic retrieval across five databases was supplemented with citation chaining. Of 149 records, 28 duplicates were removed. Of 121 studies screened on title and abstract, 69 were removed. Full texts for 52 studies were obtained and assessed for eligibility. Of these, 28 were excluded with reasons listed (no AI technique: 11; no accessibility outcome: 7; was not a digital game: 5; review/secondary study: 3; full text not available: 2). We included 24 primary studies (Figure 1).

The identification and screening figures represent a focused, non-exhaustive retrieval, rather than a direct export from a structured institutional database; thus, the upstream counts are provided as approximations, whereas the 24 studies featured are both counted and individually verifiable. The reviewed literature primarily focuses on vision-based applications, with hearing, motor, and cognitive aspects also included to a lesser degree; it encompasses cutting-edge computer vision and audio navigation tools designed for visually impaired individuals [7], [8], [9], multi-agent systems that leverage large language and vision-language models for games lacking native functionality [10], and facial expression-driven hands-free control for those with motor impairments [11]. Boolean strings have been included so that this search can be recreated and counts updated via a full database export.

Inclusion and Exclusion Criteria

Papers were considered for inclusion if they employed AI or machine learning to address a game accessibility issue and presented a tangible accessibility improvement, as shown in Table 1. Publications were excluded if they were unrelated AI game-play work lacking an accessibility component, opinion pieces without any data or new research, or had full texts that were unavailable. Title and abstract screening were followed by full-text screening in a two-stage process outlined by PRISMA (Figure 1).

Table 1. Inclusion and Exclusion Criteria

Inclusion Criteria	Exclusion Criteria
Applies AI, machine learning, deep learning, NLP, computer vision, reinforcement learning, or LLM techniques to game accessibility	Game AI with no accessibility purpose, such as NPC behaviour or balancing
Targets one or more disability domains (sensory, motor, cognitive)	General accessibility outside digital games, such as web or mobile only
Reports an accessibility feature, evaluation, or user outcome	Editorials or marketing without methodology or evidence
Published 2018–2026; peer-reviewed	Duplicates; non-English; full text unavailable

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Quality Appraisal

Each included study was evaluated according to seven questions adapted from accessibility and software engineering review practice: clearly defined objectives (Q1), AI methodology described (Q2), targeted accessibility domain specified (Q3), disability targeted specified (Q4), evaluation methodology reported (Q5), methods/artifact reproduced (Q6), and limitations discussed (Q7). Each question was given a score of either fully met (1.0), partially met (0.5), or not met (0). Table 2 shows the instrument used to score a sample of included studies for which we have methodological information. From this scoring exercise, we can observe that study objectives, description of AI methodology, and disabilities targeted are generally reported well, while reporting of reproducibility and ecological validity of evaluation is most lacking, owing to reliance on small samples in laboratory settings.

Table 2. Quality Assessment of Included Studies

Study	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Σ
Nair et al. NavStick [8]	1.0	1.0	1.0	1.0	1.0	0.5	1.0	6.5
Nair et al. spatial tools [7]	1.0	0.5	1.0	1.0	1.0	0.5	1.0	6.0
Taheri et al. hands-free [11]	1.0	1.0	1.0	1.0	1.0	0.5	1.0	6.5
Baldwin et al. DDA [12]	1.0	0.5	1.0	0.5	1.0	0.5	1.0	5.5
Morelli and Folmer [13]	1.0	1.0	1.0	1.0	0.5	0.0	0.5	5.0
Glazko et al. generative AI [14]	1.0	0.5	1.0	1.0	1.0	0.5	1.0	6.0
Nair et al. Surveyor [9]	1.0	1.0	1.0	1.0	1.0	0.5	1.0	6.5
Qiu et al. GamerAstra [10]	1.0	1.0	1.0	1.0	1.0	0.5	1.0	6.5

Threats to Validity

Several limitations are recognized. Publication bias likely favors positive findings, as disappointing or null evaluations of AI interventions are less likely to be published. We encountered language bias by restricting results to English. Database-selection bias may exclude venues published outside of the five databases searched. Limited datasets are inherent to the qualitative synthesis; public review corpora are self-selected and biased towards those who are more articulate and/or already invested in responding to reviews, and disability-specific datasets are limited and constrained by privacy concerns [15]. Finally, the comparative synthesis is subjective in nature; we report areas of convergence conservatively, and choose to highlight tensions than drive reconciliation.

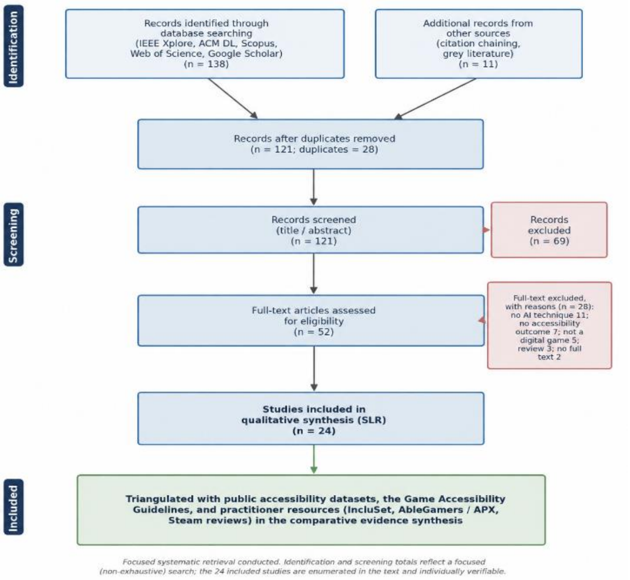

Figure 1. PRISMA 2020 Study Selection Flow

III. COMPARISON OF AI TECHNIQUES AND ACCESSIBILITY FEATURES

AI Techniques

Across the corpus, AI techniques map onto a small number of recurring accessibility functions, as compared in Table 3. Automatic speech recognition (ASR) and text-to-speech (TTS) underpin the two most demanded features, namely captioning of spoken and environmental audio for deaf and hard-of-hearing players, and spoken narration of on-screen text and menus for blind and low-vision players. Computer vision supports spatial awareness and navigation; systems that let blind and low-vision players look around a scene or that translate visual state into spatial audio extend independent play into genres previously closed to them [7], while recent multi-agent systems apply large language models and vision-language models to make games without native support accessible to blind and low-vision players [10], building on earlier sensory-substitution work that mapped gameplay to whole-body gestures and non-visual cues [13]. Vision and signal-processing techniques also drive alternative input, because gaze estimation enables hands-free control for players with severe motor impairments [16]. Adaptivity is the domain of reinforcement learning (RL) and affective computing. Dynamic Difficulty Adjustment (DDA) tunes challenge to player skill or arousal in real time, which allows for real-time adjustment of game challenge. Natural language processing and LLMs are the fastest-growing but least mature category; recent work applies generative models to remediate accessibility defects [17]. Technique maturity is uneven: captioning, narration, and DDA are comparatively well evidenced, computer-vision navigation is promising but evaluated in small studies, and generative AI is high-potential yet under-validated.

Table 3. Comparison of AI Techniques and Accessibility

Technique	Function	Disability	Evidence	Maturity
ASR and speech-to-text	Captions and subtitle for speech and sound effects	Hearing	[18]	Mature
TTS and speech synthesis	Menu and text narration; screen-reader output	Vision	[8]	Mature
Computer Vision	Navigation, look-around, spatial awareness	Vision; Motor	[7], [8]	Emerging
RL, DDA and Affective	Adaptive difficulty to skill	Cognitive; Motor	[19], [12]	Evolving
Gaze, Facial and Gestures	Hands-free alternative input	Motor	[16], [11]	Evolving
NLP, LLMs and Generative	Content Optimization; Readability Enhancement	Cognitive; Multiple	[20], [21]	Nascent

Accessibility Features

AI-enabled features can be usefully classified according to the Game Accessibility Guidelines taxonomy [4], while recent surveys place AI-powered accessibility support in context of what it adds beyond existing static options. Popular accessibility features cited by the Guidelines community range from control remapping to text scaling, color-blindness support, and subtitle availability [4]. AI techniques relate to each of these areas: Automatic Speech Recognition can author and time captions while labelling speaker and directionality, Text-to-Speech Engines and screen-reader support can scale game narration, and computer vision / automated recoloring can customize color-palettes or explicitly surface symbolic redundancy for color-vision deficiency. Learned input can support traditional remapping as well as alternative control schemes. Designer-driven best practices echo these concerns: APX communities discuss accessibility through barriers which are organized into Access patterns (control schemes, graphics and presentation) and Challenge patterns which encourage designers to consider shared barriers instead of diagnostic groups [5]. Captions and subtitles are also a major topic of ongoing study; recent work draws clearer lines between subtitles for dialogue vs. closed captions that communicate speaker and non-speech information [21]. AI's unique contribution is personalization; if guidelines call for binary options, AI can dynamically adjust presentation and difficulty on a per-person basis and respond to players during play. This is also where dangers lie, as features which adapt to player behavior will generally require behavioral and physiological telemetry, leading to privacy concerns which players and researchers have noticed are not always addressed [22]. In summary, AI most evidently improves authoring/time-intensive features like captioning, game narration, and colorblindness' recoloring, and features which can logically adapt to player behavior at runtime like difficulty and input remapping. AI should be used to extend, not replace, the explicit options that researchers and practitioners have been discussing for years.

Disability Coverage

The distribution is extremely skewed. Vision and hearing receive the bulk of attention, reflected in prevalence of both computer vision navigation and ASR captioning efforts [23]. Motor access fares relatively better in light of consumer hardware availability, but still lags in academic AI research, though contributions related to facial-expression and gaze input show promise for users with severe motor limitations [16]. Cognitive and neurodivergent access is by far the least discussed with regards to games specifically, despite progress in text simplification and communication assistance with LLMs in related areas [24] This skew repeat broader observations that research has been focused around utility use-cases and disabilities that are easier to operationalize with tools [3] or for which limited training data is available [15]. In essence, the very areas where AI's adaptability is most potent—cognitive, motor, and intersectional needs—are precisely the ones that have received the least research attention.

IV. PUBLIC DATASET EVIDENCE SYNTHESIS

Public datasets provide population-scale signal complementary to smaller-scale research efforts, but were not created for accessibility analysis and should be interpreted cautiously (Table 4). Publicly mirrored Steam review corpora ranging from millions to +100M reviews can be searched for accessibility keywords (subtitles, colorblind, remap, speech-to-text, narration, adaptive difficulty, voice control, etc.) to surface unprompted player praise or demands. These datasets are massive, ecologically valid, and timestamped, but accessibility annotations are rare, unstructured, sampled from already-engaged players only, and disability status is never confirmed. Kaggle review datasets oriented around accessibility do some filtering or labeling work on subsets to facilitate sentiment and theme analysis, improving accessibility at the expense of total coverage or provenance clarity.

The Game Accessibility Guidelines serve less as dataset than feature catalog, associating concrete features with novice, experienced, and expert degrees of effort as well as disability categories [4]. The IncluSet meta-repository catalogs metadata for over one hundred accessibility datasets created by individuals with disabilities and older adults for the explicit purpose of improving machine-learning training and benchmarking; it details many of the shared limitations of datasets, namely low sample sizes, heterogeneous capture contexts, privacy sensitivity, and general difficulty of discovery/reuse [15]. Datasets from serious games such as rehabilitation and education, often indexed by repositories like IncluSet, add examples of disability-related interactions and support for adaptive, DDA-informed personalization, but typically lack focus on entertainment contexts [3].

Practitioner experience has also been collated through AbleGamers and their accompanying APX program. Demographic and player-panel surveys help identify who these players with disabilities are and what features they are actually using (many games offer remapping, subtitles, and separate assistive tech by default). APX then converts their research into 22 accessible design patterns focused around particular players or player obstacles [25]. Between them, the resources listed above triangulate nicely. Steam provides large samples of user ratings and reviews, the Guidelines provides a categorical taxonomy of features, IncluSet provides links to source locations of training data, and APX offers disabled player-vetted design heuristics. Each dataset individually is insufficient. None provide any validated labels regarding player disabilities, and thus claims regarding representations of players with disabilities have to be taken with a grain of salt. The true value of these bodies of information lies in how they supplement each other with qualitative evidence.

Table 4. Comparison of Public Datasets and Practitioner Resources

Source	Type	Focus	Strengths	Weakness
Steam Review Corpora	User Review (text)	Implicit, keyword-filterable mentions	Population; Long-term	Sparse; unlabeled
Kaggle Accessibility Review Sets	Curated or labeled reviews	Sentiment and theme on feature mentions	Tractable; ready for machine learning	Limited coverage; variable provenance
Game Accessibility Guidelines	Taxonomy and guidelines	Feature to disability classification	Community-validated; effort-tiered	Descriptive, not empirical data
IncluSet Repository	Dataset metadata	Disability generated datasets for ML	Surfacing and discovery; provenance metadata	No hosting; data scarcity persists
Serious-games Datasets	Interaction and outcome data	Rehabilitation and education; adaptation	Disability-relevant signals	Rarely entertainment-focused
AbleGamers and APX	Practitioner research and patterns	Validated player priorities; barriers	User-centered; design-actionable	Not a public quantitative dataset

V. COMPARATIVE EVIDENCE SYNTHESIS

Examining across these streams — compared in Table 5, summarised in Figure 2 — shows evident alignments as well as instructive areas of tension. Captioning/subtitles, textual research, telemetry/user feedback, and designer guidelines align strongly; here research clarifies nuances of caption quality and presentation of non-speech information [26]. Players consistently ask for subtitle quality improvements and subtitling specifically ranks among top accessibility feature requests [4]. Controller remapping and other input options are another strong point of alignment; data from APX and our own player-panel both suggest control remapping is nearly universally desired [27], and aligns with input-method research in AI literature [11]. Text scaling/customization and colourblind options are another area with high convergence.

Similarly instructive are the points of divergence between these streams. Cognitive accessibility stands out as being relatively underemphasized in game scholarship but suggested by user experience complaints of difficulty and by parallel work on LLM-based automatic game simplification, representing a gap in relative emphasis more than a direct disagreement [20]. The multiplayer 'fairness' debate represents a clearer tension, where guidelines and user data desire accessibility options enabled in competitive contexts but designers fear providing unfair advantage, and where DDA scholarship has uncovered mixed reactions to adaptive challenge systems [4]. Finally, the tension between personalization and privacy represents a starkest point of disagreement. The personalized AI systems most commonly discussed as valuable for accessibility rely on personal data types that players and researchers are concerned are governed too immaturity [22], and which we know from broader work can encode bias in generative AI models [28]. Notably this lack of consensus extends to designer guideline documents; past work has identified recommendations within such sets that were either unactionable or simply not implemented by practitioners [29].

Table 5. Comparison Across Literature, User Signal and Practitioner Guidance

Theme	Academic Emphasis	User & Dataset Signal	Practitioner Guidance	Status
Captions & Subtitles	Caption quality, non-speech cues [21]	Frequent demand in reviews	Top-priority feature [4]	Alike
Remapping & Input	Alternative input [16]	Common request	Common requirement	Alike
Color & Visual	Recoloring and contrast	Colorblind mentions	Common accessibility complaint [4]	Alike
Difficulty & cognitive	DDA and affective tuning [19]	Reported difficulty with complexity	Adjustable challenge [4]	Partial
Blind Navigation	Look-around, spatial audio [8]	Niche but vocal	Emerging guidance	Researc h led
Privacy of Adaptation	Data trade-offs [22]	User feedback gap	Under-specified	Diverge nt

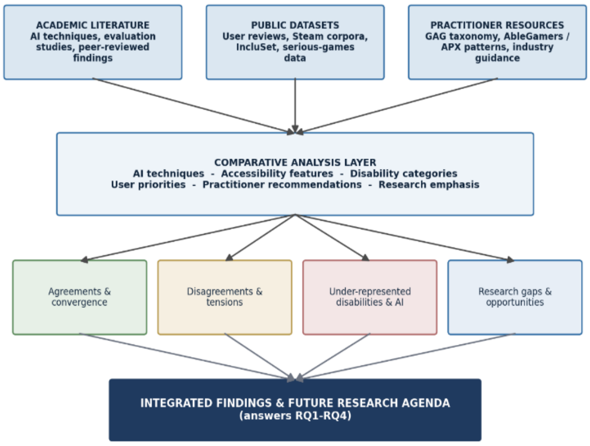

Figure 2. Integrated Evidence Synthesis Framework Linking the Three Streams to the Research Questions

Table 6 provides an integrated synthesis that directly answers each of the research questions. The specific AI techniques currently in use (answer to RQ1) center on ASR captioning, TTS narration, computer- vision navigation, RL-based DDA, and newly-emerged generative AI. Application to specific needs (answer to RQ2) is heavily weighted towards sensory access, with thinner but growing support for motor and cognitive needs. Agreements and disagreements between streams (answer to RQ3) show substantial consensus on captioning, remapping, and visual customization, but point to an emphasis gap on cognitive accessibility and notable tensions around multiplayer fairness and data privacy. The gaps and opportunities not covered by other questions (answer to RQ4) are discussed below.

Table 6. Integrated Comparative Evidence Synthesis Aligned to the Research Questions

Dimensions	Convergent Findings	Tensions or Gap	Future Opportunities
AI Techniques (RQ1)	ASR, TTS, computer vision, and DDA well represented	Generative AI under-evaluated; bias-risk [28]	Rigorous, ecologically valid LLM evaluation
Challenges (RQ2)	Sensory access strongly covered	Motor and cognitive coverage limited [3],[2]	Adaptive AI targeted to under-served domains
Cross stream (RQ3)	Captioning, remapping, and visual alignment [5],[4]	Cognitive emphasis gap; multiplayer fairness [12]	Participatory design with player communities

Disability Balance (RQ4)	Vision and hearing mature	Intersectional needs neglected	Disability-balanced, shared benchmarks
Data and Ethics	Need for disability data acknowledged [15]	Privacy of personalization immature [22]	Privacy-preserving, consented adaptive AI

VI. DISCUSSION AND FUTURE DIRECTIONS

All this points toward cautious hopefulness. AI is capable of reducing particular accessibility barriers through its ability to customize content on the fly, a dynamic feature static guideline options lack [30]. At the same time that personalization expands opportunity, it also imposes new responsibilities. Accessibility and privacy considerations must be designed in tandem since personalized systems classify ability from observations of behaviour and physiology; consented, on-device, or privacy preserving solutions should therefore be prioritized [22]. Generative systems also confer agency, but documented bias in their outputs against disabled individuals means independent evaluation and disability inclusive benchmark datasets are ethical requirements, not perks [28].

Looking at this, three emphases stand out. First, additional research should support the often-overlooked motor, cognitive, and especially intersectional accessibility needs, where AI can provide the greatest benefit but currently has the least evidence to show for it [3]. Second, resources should be directed toward creating and sharing disability-balanced datasets and benchmarks; efforts like IncluSet highlight both interest and challenges (namely sparse data, heterogeneity, and privacy) [15]. Third, we should embrace participatory, player-centered study designs conducted in natural play contexts, evolving the player panel and APX frameworks to empower affected groups to define the problem and measure it [27]. Further research needs to be conducted with larger, more environmentally realistic study designs, and reporting practices must be improved to enable replication, which was the lowest-rated aspect in this review. However, it's important to acknowledge the constraints of this review, namely its concentration on English-language research from five databases, the absence of real-time metrics, and the subjective nature of synthesizing findings from various sources, all of which temper the interpretability of these results.

VII. CONCLUSION

Consolidating academic literature, publicly available datasets, and practitioner resources, this review assessed the ways artificial intelligence (AI) is being utilized for game accessibility. We synthesized 24 primary studies, culled from an initial 149 records searched across five databases (IEEE Xplore, ACM Digital Library, Scopus, Web of Science, and Google Scholar) following PRISMA 2020 guidelines, and supplemented by public accessibility datasets and practitioner resources, to analyze the application of artificial intelligence (AI) in accessibility. Findings indicate AI applications tend to focus on a small number of relatively mature use cases — automatic speech recognition (ASR)-based captioning, text-to-speech (TTS) narration, computer vision-based navigation, and reinforcement learning (RL)-based dynamic difficulty adjustment (DDA), as represented by NavStick, Surveyor, and multiplayer DDA research — while next-generation large language models and other generative AI techniques, as represented by GamerAstra and RAVEN, are the least studied but fastest-growing category.

Quality grading of included research (average score: 6.1 out of 7 across seven domains) suggests research objectives, AI techniques employed, and target disabilities are usually well described, while evaluation reproducibility and ecological validity were graded lowest. Participant disabilities were heavily skewed towards vision and hearing, with motor accessibility underrepresented despite positive trends in consumer hardware, and cognitive accessibility and intersectionality being the least researched areas — ironically, where adaptive AI has the potential to shine.

Comparing and contrasting academic datasets with Steam-playercount signals and game accessibility practitioner (APX/AbleGamers) heuristics revealed strong agreement on captioning, control customization, and image modification use cases, while cognitive accessibility, multiplayer balance, and telemetry-dependent personalization's impact on player privacy were the biggest gaps between research and real-world impact. This review's primary contribution is not methodological, but rather collective: considered together, academic research publications, public datasets, and GI industry practitioner resources help distinguish fact from hype and clear a path towards responsible AI game accessibility built on disability-inclusive datasets, evaluative methodological rigor, and participatory AI design principles. To truly meet accessibility needs, AI will require less innovation at the algorithm level and far more consideration for the players these algorithms have historically ignored, particularly players with cognitive, motor, and intersectional disabilities.

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