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The Perfect Storm: The Marketplace Conduction Model of Consumer Vulnerability (MCM-CV)

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The Perfect Storm: The Marketplace Conduction Model of Consumer Vulnerability (MCM-CV)

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The Perfect Storm: The Marketplace Conduction Model of Consumer Vulnerability (MCM-CV)

Abstract

While consumer vulnerability can be a temporary or situational state, some consumers are more susceptible to enduring and recursive vulnerability occurrences. In this manuscript, the authors develop the Marketplace Conduction Model of Consumer Vulnerability (MCM-CV) to explain how vulnerability emerges, evolves, and persists across marketplace interactions. Drawing on the lived experiences of consumers with non-apparent (i.e., non-visible, invisible, or hidden) disabilities, the authors identify asymmetric disclosure requirements—the expectation that some consumers must reveal personal and often stigmatized information to obtain equitable access—as a distinctive vulnerability trigger within marketplace systems. The authors propose that responses to disclosure-triggered vulnerability shape both immediate and future marketplace experiences through recursive feedback processes operating across micro-, meso-, and macro-levels. By conceptualizing responses along a strengths- and deficit-based continuum, the model highlights how marketplace actors can reinforce vulnerability trajectories or facilitate more inclusive and equitable participation.

Keywords: Consumer Vulnerability; Disability; Asymmetric Disclosure Requirement; Market Access and Inclusivity; Stigma; Universal Design; Transformative Consumer Research

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Consumer vulnerability has evolved from a peripheral concern to a central lens through which markets and consumer experiences are understood. This transformation reflects the growing recognition of its heterogeneous and dynamic nature (Drake, Murali, and Pender 2025; Hill and Sharma 2020; Mende et al. 2024; Salisbury et al. 2023). Much of the existing research identifies *what* leads to consumer vulnerability and coping mechanisms. However, the *continual ongoing cycles* of vulnerability where consumers navigate different path trajectories have been less explored (for an exception see Mende et al. 2024). In this manuscript, we extend Hill and Sharma's (2020) consumer vulnerability model with the Marketplace Conduction Model of Consumer Vulnerability (MCM-CV). While any consumer may experience vulnerability, some consumers are more susceptible to enduring and iterative occurrences due to a "perfect storm" of vulnerability pressures. Micro-, meso-, and macro-level conditions dynamically interact to yield uneven consumption experiences where consumers are unable to achieve marketplace goals and, thus, are more susceptible to potential harm (Pavia and Mason 2014; Salisbury et al. 2023). These dynamics, and the reactions they provoke, create a market system of intensifying, ongoing consumer vulnerability. For example, a disabled consumer's condition by itself may increase the possibility of experiencing vulnerability (e.g., being unable to walk long distances). However, the likelihood is compounded by meso-level factors such as inaccessible marketplace environments and macro-level factors including stigmatization and discrimination (Mirabito et al. 2016).

The model further advances the consumer vulnerability literature by illuminating how triggers in the system, such as information disclosure conditions, shape marketplace experiences. In this context, some consumers need to inform marketplace actors of personal information (e.g., disability diagnosis) to gain equitable market access. We term this practice *asymmetric*

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disclosure requirement, in which consumers must reveal personal, identity-linked, or health-related information to access, use, or complete a market exchange that other consumers are not required to disclose to obtain equivalent marketplace access. Revealing this information can create tension for the consumer as they negotiate whether to disclose the information. The tension may be heightened when the information disclosed carries a stigma, as this can place affected consumers at greater risk of discrimination (Mirabito et al. 2016). The MCM-CV model explores different trajectories triggered by disclosure occurring (or not occurring) at different points of the vulnerability cycle and how this impacts the consumers' potential for harm. The outcomes of these trajectories impact future vulnerability cycles. While asymmetric disclosure requirements represent a particularly salient form of marketplace disclosure, disclosure more broadly functions as a structural mechanism shaping vulnerability trajectories across marketplace interactions.

The responses to vulnerability occur across micro-, meso-, and macro-levels actors. The actors' underlying cognitive and ideological mindset orientation impacts how they approach and develop their responses (Adkins and Jae 2010; Baker and Mason 2012; Hill and Sharma 2020; Mende et al. 2024). In the MCM-CV, these orientations are conceptualized as strengths-based and deficit-based perspectives, located on a continuum. This model examines how these varying perspectives shape the ways consumers, markets, and regulatory bodies interpret and respond to vulnerability. Research often views vulnerability from a deficit-based perspective, which focuses on consumers' limitations or disadvantages (e.g., Baker 2009). In contrast, a strengths-based perspective highlights opportunities for inclusive and equitable solutions engaging and empowering consumers (Bhogan-Nair et al. 2024; Cross and Ekpo 2025; Higgins 2020; Lteif et al. 2025; Patrick and Hollenbeck 2021). These perspectives impact both the immediate outcomes

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and the longer-term consequences of vulnerability, including how future cycles are recalibrated. The model identifies the emergent tensions arising from misalignments when micro-, meso-, and macro-level actors adopt different perspectives. In proposing the MCM-CV, we frame vulnerability as a process consumers actively navigate in real time. The model shows a clear dynamic flow from the initial pressures through experiences and outcomes incorporated into continual recalibrations across interactions rather than being resolved once coping occurs. This conceptualization helps move our understanding from “what vulnerability is” to “how vulnerability is negotiated and reproduced in the marketplace.”

Responding to calls to expand impact, access, and inclusivity in the marketplace (e.g., Aksoy et al. 2019; Boenigk et al. 2021; Fisk et al. 2018; Scott, Hassler, and Martin 2022), we draw upon the marketplace experiences of consumers with non-apparent (i.e., non-visible, invisible, or hidden) disabilities as a context in the development of the proposed model. These consumers are often subjected to a disclosure litmus test to obtain accommodations necessary to receive equitable access to the marketplace (Fisk et al. 2018). As their disability is non-apparent, they must weigh whether to disclose their disability, which impacts not only market access, but potentially exposes them to stigmatization. We examine consumer vulnerability through this lens for two additional reasons. First, the number of consumers worldwide impacted by a non-apparent disability is staggering. The World Health Organization estimates over 1.3 billion people in the world are disabled (WHO 2023) and about 80% of these individuals live with a non-apparent disability¹ (Centers for Disease Control and Prevention 2025). Second, extant research shows consumers with non-apparent disabilities routinely encounter consumer vulnerability, yet this context is underrepresented in the literature.

¹ See Web Appendix A for a formal definition and a non-exhaustive list of non-apparent disabilities.

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This research makes four primary contributions. First, we highlight consumer vulnerability as a dynamic process, rather than as a static or episodic condition, focusing on how the interplay of vulnerability pressures drive the iterative cycles. Second, we identify asymmetric disclosure requirements as a structural mechanism shaping vulnerability trajectories across marketplace interactions. Third, we introduce asymmetric disclosure requirements as a multi-level, precipitating disruption mechanism revealing breakdowns in market systems. Finally, we demonstrate how mindset orientations across consumers, marketplace actors, and policy makers reinforce or mitigate vulnerability over time. In the following sections, we introduce the model of MCM-CV. We then outline implications for consumers with non-apparent disabilities, marketplace actors, and public policy makers. We conclude by identifying future research opportunities.

The Marketplace Conduction Model of Consumer Vulnerability²

Recent literature treats consumer vulnerability as a dynamic *state* and focuses on the complex, multidimensional process of experiencing vulnerability (e.g., Baker and Mason 2012; Hill and Sharma 2020; Kubacki, Siemieniako, and Brennan 2020; Mende et al. 2024; Riedel, Beatson, and Baker 2025; Salisbury et al. 2023). This approach prevents responsibility from being attributed to a single demographic or environmental factor and accounts for temporal variation (Gergen, McNamee, and Barrett 2001; Pavia and Mason 2014). Moreover, community- and context-based perspectives boast greater potential to drive social change (Baker and Mason 2012) which is a central tenant of transformative consumer research (Mick 2006; Mick et al.

² For a comprehensive review of the consumer vulnerability literature, see Hill, Ronald Paul and Eesha Sharma (2020), "Consumer Vulnerability," *Journal of Consumer Psychology*, 30 (3), 551-70.

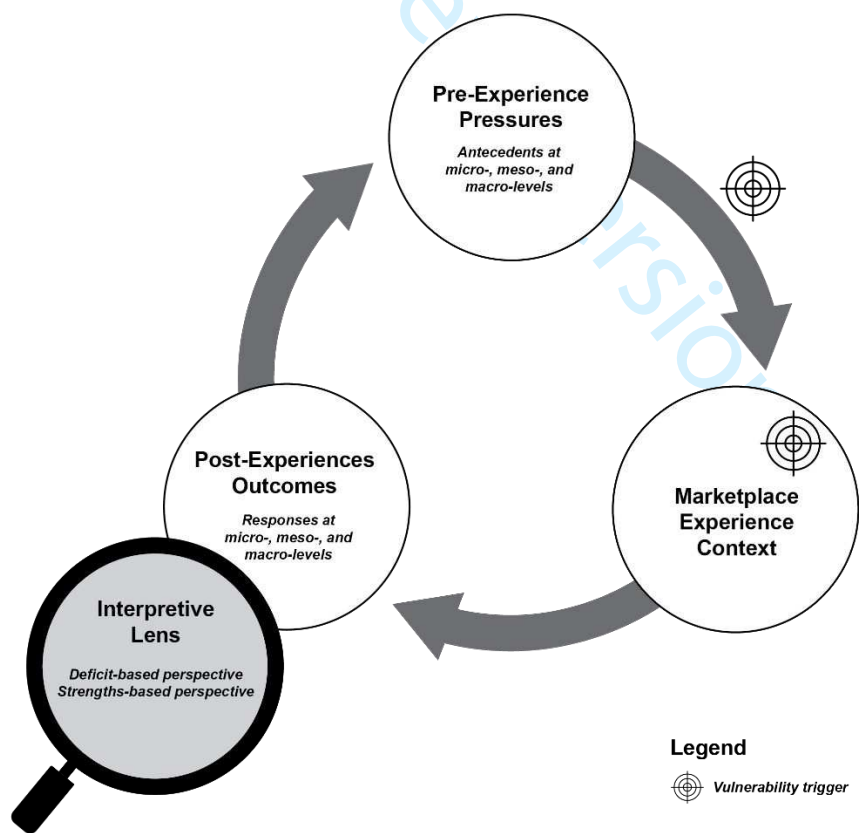
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2012). As such, the Marketplace Conduction Model of Consumer Vulnerability (MCM-CV) conceptualizes vulnerability as a dynamic, iterative process. Whereas prior vulnerability frameworks primarily conceptualize vulnerability as emerging from situational interactions among individual characteristics, states, and external conditions, the MCM-CV extends this perspective by emphasizing how vulnerability experiences accumulate, reshape expectations, and influence future marketplace participation over time. Building on Baker, Gentry, and Rittenburg (2005) and Hill and Sharma (2020), the model advances the understanding of consumer vulnerability by conceptualizing marketplace participation as a recursive feedback loop consisting of three interconnected phases: Pre-Experience Pressures, Marketplace Experience, and Post-Experience Outcomes. Each iteration of the process informs future iterations. Asymmetric disclosure requirements determine the movement trajectories throughout these phases. We, therefore, foreground asymmetric required disclosure as a distinctive and understudied vulnerability trigger that activates and intensifies the cycle of vulnerability, leading to heightened immediate or future consumer vulnerability for consumers with non-apparent disabilities.

Non-apparent disabilities, including fibromyalgia, lupus, and anxiety disorders, are not readily detected by others, but significantly affect daily life. Many non-apparent disabilities, such as myalgic encephalomyelitis, reduce energy levels, making routine activities like grocery shopping exhausting. Other disabilities, hyperacusis for example, can create sensory overload or pain in noisy retail settings, rendering such environments functionally disabling (Beudaert, Gorge, and Herbert 2017). As a result, common marketing assumptions about marketplace design, such as standard noise levels or speed of service, may not hold for individuals with non-apparent disabilities, contributing to their discomfort and unmet needs in the marketplace

(Beudaert, Gorge, and Herbert 2017; Kaufman-Scarborough 2000). Due to this, consumers with non-apparent disabilities often need accommodations to equitably access the market. To receive accommodations, they face asymmetric disclosure requirements; however, disclosing their stigmatized identity may result in discrimination. Whether and when consumers disclose their disability impacts their marketplace experience and the likelihood of experiencing harm. Responses at the micro-, meso-, and macro-levels to disclosure-triggered vulnerability shape both immediate and future marketplace experiences through recursive feedback processes operating across micro-, meso-, and macro-levels. By conceptualizing responses along a strengths- and deficit-based continuum, the model highlights how marketplace actors reinforce vulnerability trajectories or facilitate more inclusive and equitable participation. See Figure 1.

Figure 1: The Marketplace Conduction Model of Consumer Vulnerability



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Phase 1: Pre-Experience Pressures

Prior to marketplace interactions and experiences, consumers face overlapping, compounding pressures that can increase the possibility of experiencing vulnerability within the marketplace (Hill and Sharma 2020; Mende et al. 2024; Salisbury et al. 2023). These pressures originate from the individual, family unit, community, or elsewhere in the macroenvironment (Baker and Mason 2012; Marangoni et al. 2025; McKeage, Crosby, and Rittenburg 2018). Drawing from Riedel, Beatson, and Baker (2025), Salisbury et al. (2023), and Ecological Systems Theory, the first phase of the MCM-CV focuses on the pre-experience pressures originating from the micro-, meso-, or macro-levels as well as the interactions among these dimensions. Individuals, their characteristics, and behaviors constitute the micro-level. The meso-level captures marketplace actors and environments (e.g., a retail store) while the macro-level encompasses society at a broader level, including policy makers and regulatory agencies as well as dominant attitudes, stigmatization, and discrimination norms. Pressures from these three levels increase the likelihood of consumers with non-apparent disabilities experiencing vulnerability. At the micro-level, they face challenges related to their biophysical and/or psychosocial condition (e.g., tiredness; Sowińska and Pezoa Tudela 2023). They also confront external meso-level challenges such as structural barriers in the marketplace (Hassard et al. 2024; Quinn and Chaudoir 2009) and macro-level conditions including stigmatization and discrimination (Machin et al. 2019; Mirabito et al. 2025). These varying pressures dynamically interact to create unique conditions and circumstances that increase or decrease consumers' susceptibility to harm in the marketplace (Salisbury et al. 2023).

Across the three-level framework, resource control and access play a critical role in shaping potential consumer vulnerability experiences (Hill and Sharma 2020; Salisbury et al.

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2023). Within the micro-level, disabled people incur substantial disability-related expenditures to reach the same standard of living as nondisabled peers (often discussed as a “disability tax;” Mitra et al. 2017; Mont 2023). In its 2025 report, a UK-based disability rights organization reported that on average, disabled households need £1,095 more per month to achieve the same standard of living as non-disabled household (Scope 2025). This is expected to increase to £1,224 by the 2029-2030 financial year. The additional costs are especially problematic considering the high rates of unemployment and underemployment among those with disabilities, which reduces their access to financial resources (DuBois, Bradley, and Isvan 2025; Manno et al. 2024; U.S. Department of Labor 2025). Consumers with disabilities simultaneously need access to more financial resources to maintain a similar standard of living while receiving less due to employment discrimination.

At the meso-level, insurance companies often act as gatekeepers for consumers with disabilities who need to acquire accessibility aids (e.g., trained service animals, screen readers, light-filtering glasses, hearing aids, vehicle and home modifications). Without these resources, their susceptibility to harm increases. Additionally, companies make determinations on how (and in some instances whether) to incorporate accessibility features into their business model. Smaller companies or companies with older facilities may struggle to access resources to implement accessible features, especially those which go beyond simple compliance with regulatory requirements. For example, some businesses might not have budget set aside to commission braille menus. Governments and other policy makers within the macro-level can set accessibility standards and control access to resources that help with implementation. Whether originating at the micro-, meso-, or macro-level, the lack of financial resource access increases susceptibility to harm and experiencing consumer vulnerability (Salisbury et al. 2023).

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Phase 2: Marketplace Experience

Within the MCM-CV, vulnerability emerges in marketplace interactions characterized by power asymmetries, reduced control, and dependence, which together limit a consumer's ability to engage effectively in the marketplace (Baker and Mason 2012; Hill and Sharma 2020; Mason and Pavia 2015) and exposes them to the risk of harm (Salisbury et al. 2023). This phase focuses on the specific marketplace encounter where consumers are *at risk* of harm due to the pressures from Phase 1. The presence of this risk is a key component on whether a consumer experiences vulnerability regardless of whether the harm is realized (Salisbury et al. 2023).

Consumers rarely enter marketplace interactions without prior context. Accumulated marketplace experiences shape expectations, confidence, and perceived environmental control during marketplace experiences as well as the potential risk of harm (Baker, Gentry, and Rittenburg 2005; Salisbury et al. 2023). Consumers with non-apparent disabilities frequently encounter heightened susceptibility to harm due to interacting micro-, meso-, and macro-level pressures. As a result, marketplace participation requires active management of these risks. A central mechanism in managing the risk of harm is an asymmetric disclosure requirement—the expectation that some consumers must reveal personal, often stigmatized information to achieve equitable market access. In contrast to voluntary disclosure examined in prior marketing research (e.g., Chen 2013; Melzner, Bonezzi, and Meyvis 2023; Zeng et al. 2021), an asymmetric disclosure requirement reflects a structurally embedded condition in which disclosure is not optional, but functionally necessary for equitable market participation. Because non-apparent disabilities are not immediately known to marketplace actors in the meso-level, these consumers frequently face complex decisions regarding whether, when, and how to disclose their disability to potentially receive accommodations to access the market (Machin et al. 2019; Santuzzi et al.

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2019; Ysasi, Becton, and Chen 2018). The information disclosure, at least theoretically, reduces the risk of harm associated with an inaccessible marketplace *if* the consumer receives appropriate accommodations. However, even if consumers disclose their disability, the susceptibility to harm remains if accommodations are denied or not available. For consumers with non-apparent disabilities, vulnerability is often intensified by the need to navigate legitimacy and disclosure-related uncertainty, adding to stress and potential for harm. These consumers frequently encounter skepticism regarding their accommodation needs, face accusations of exaggeration or deception, and are sometimes labeled as less capable (Joachim and Acorn 2000; Nario-Redmond 2010; Quinn and Earnshaw 2013; Vice et al. 2020). Such interactions reinforce psycho-emotional and social barriers that extend beyond physical accessibility constraints (Beudaert, Gorge, and Herbert 2017).

Additionally, being exposed to the risk of one type of harm can lead to risk of other types of harm (Salisbury et al. 2023). While potentially decreasing the risk of harm in one area (improving accessibility), asymmetric disclosure requirements can increase the risks of other types of harm as it reduces consumer control over personal information, introduces privacy and stigmatization risks, and reinforces structural inequities in marketplace access. The decision of whether and when to discuss their disability significantly impacts consumers' marketplace experiences as they attempt to manage potential harm. By centering consumers with non-apparent disabilities, this research highlights how disclosure decisions associated with asymmetric disclosure requirements create additional cognitive, emotional, and social burdens shaping marketplace participation. Building on this framework, we propose three experience trajectories representing distinct pathways through the feedback loop that subsequently shape vulnerability outcomes and future marketplace engagement patterns. Although asymmetric

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disclosure requirements can exist across multiple domains (e.g., gender identity, pregnancy, financial hardship), non-apparent disability represents a particularly salient case because it involves private health information that is both highly stigmatized and directly tied to participation outcomes. We conceptualize asymmetric disclosure requirements as vulnerability triggers reverberating throughout the marketplace experience and shaping subsequent trajectories through the feedback loop (Baker and Mason 2012; McKeage, Crosby, and Rittenburg 2018). The triggers in Figure 1 represent moments in which asymmetric disclosure requirements activate or intensify vulnerability, creating recursive effects influencing subsequent marketplace expectations and future engagement patterns.

Experience trajectory 1: non-disclosure

In the first trajectory, consumers attempt to complete marketplace interactions without disclosing their non-apparent disability. Consumers may decide not to disclose for a multitude of reasons including not wanting to reveal private health information, fear of discrimination or not being believed, worry about data security, or not knowing there are potential accommodations. For example, a consumer with myalgic encephalomyelitis may not request assistance and try to navigate the airport on their own to avoid disclosing their disability. Non-disclosure may reduce some of these potential risks (e.g., not being believed), yet it can open the consumer to other risks of harm as accessibility barriers in this trajectory remain largely unrecognized by actors in the meso-level. A consumer who is deaf or hard of hearing may attempt to obtain prescription medication at a pharmacy where plexiglass partitions create physical barriers and masked pharmacists impede lip-reading, auditory clarity, and non-verbal communication. Without disclosure, pharmacy staff may continue using standard verbal communication protocols, creating misunderstandings regarding prescription instructions, dosage clarification, or

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medication warnings. Additionally, attempts to clarify information through repeated verbal exchanges may compromise confidentiality if sensitive health information must be discussed publicly. Micro-level communication barriers, meso-level safety policies such as mask requirements, and macro-level public health expectations and discrimination collectively shape accessibility limitations. Because disclosure does not occur, marketplace actors lack information necessary to modify communication approaches, leaving consumers to navigate reduced accessibility and increased safety risks independently (Adkins and Ozanne 2005; Gartland et al. 2022; Poon and Jenstad 2022).

In this trajectory, consumers with non-apparent disabilities may exit the market completely or experience an inequitable encounter in which they forfeit getting the product, experience, and/or service they want (Higgins 2020; Machin et al. 2019). Additionally, not disclosing may lead to paying a social cost. While consumers with non-apparent disabilities may avoid being the subject of disability-related stigma, fully masking or passing is not always possible. Although avoiding disclosure, this trajectory can reinforce vulnerability through reduced access, lower perceived control, and diminished marketplace participation (Hill and Sharma 2020).

Experience trajectory 2: disclosure prior to marketplace interaction

In the second trajectory, consumers disclose their non-apparent disability before engaging in marketplace interactions to request accommodation and reduce anticipated barriers. This may be done in a variety of ways, including contacting customer service representatives, accessibility coordinators, or reaching out virtually (e.g., emailing or completing online forms; Gotti et al. 2024). Perhaps, a blind or visually impaired consumer contacts a movie theater in advance to confirm the availability of assistive technologies such as audio description devices. Disclosure

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enables marketplace actors to anticipate accessibility needs and potentially implement proactive accommodations. Theoretically, this results in the accommodations being in place, allowing for equitable access, and decreasing consumer stress about the encounter.

While prior disclosure is made to try to reduce the risk of harm during a marketplace encounter, it does not always eliminate the risk and in some cases may increase other types of risk. The market may fail to deliver reliable or coordinated accessibility responses (e.g., unavailable assistive technology, insufficient staff training, or fragmented service protocols), creating a disconnect between consumer preparation and marketplace execution (Dolan 2023; Mason and Baker 2014; Valero Sanchez 2024). In the example of a visually impaired consumer the individual may still encounter barriers upon arrival such as discovering the equipment is already in use, malfunctioning, incompatible with their needs, or that staff lack training to operate it. Miscommunication may also occur where staff are not informed of the accommodation request and are not prepared for the consumer. The consumer may encounter stigmatization, skepticism, or discriminatory treatment following disclosure of their disability. Thus, even after proactively disclosing their needs, the consumer may still face harm in accessing the marketplace. Additionally, even when the technology is available, this pre-emptive disclosure places the burden on the consumer to proactively arrange for accommodation—something other consumers do not have to do—which contradicts Title III of the Americans with Disabilities Act which requires businesses to be accessible and not place undue burden on consumers to ensure accommodations (U.S. Department of Justice 2012).

Experience trajectory 3: disclosure during or after marketplace interaction

In the third trajectory, disclosure occurs during or following marketplace interactions in response to accessibility challenges. In this trajectory, disclosure frequently occurs to front-line

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employees during point-of-sale or customer service encounters. While it may be a discreet interaction between the customer and service provider, sometimes it takes place in front of an audience of additional staff or customers. This increases information exposure and increases concerns about privacy and potential discrimination by other staff or customers. Additionally, accommodation decisions made *in situ* may increase variability in accommodation quality and consistency, potentially resulting in uneven or suboptimal access (Johansson et al. 2023; Santuzzi et al. 2019; Valero Sanchez 2024). Disclosure in this path tends to be reactive rather than proactive with immediate barriers preventing meaningful participation. While reactive disclosure may allow for partial accommodation, vulnerability also emerges when accommodations satisfy minimal compliance requirements but fail to support full experiential inclusion.

Across these trajectories, consumers with non-apparent disabilities frequently navigate multiple and competing risks of harm simultaneously. Actions intended to reduce one form of risk (e.g., disclosing a disability to improve accessibility) may unintentionally increase exposure to other forms of risk such as privacy loss, stigma, discrimination, or reduced control over personal information (Salisbury et al. 2023). Consequently, marketplace participation often involves balancing tradeoffs rather than eliminating vulnerability altogether.

Importantly, these experiences operate at both subjective (felt) and objective (observed) levels of vulnerability. Consumers may experience stress, uncertainty, or reduced control during marketplace interactions, while marketplace actors such as firms, employees, and policymakers may interpret and respond to these experiences differently (Hill and Sharma 2020; Riedel et al. 2025). Moreover, a consumer with non-apparent disabilities is part of the broader disability community. As they observe other consumers with both apparent and non-apparent disabilities

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experience harm in the market, their own experiences with vulnerability become shaped. These interpretations and responses shape how vulnerability is understood, reinforced, or disrupted over time and influence future marketplace expectations and engagement patterns through the recursive feedback process described in the MCM-CV.

Phase 3: Post-Experience Outcomes

While experience trajectories describe how consumers encounter the risk of harm and asymmetric disclosure requirements, responses to ensuing vulnerabilities reflect how consumers and marketplace actors interpret and attempt to resolve these encounters. Phase 3 represents the post-experience stage in which consumers and marketplace actors interpret, respond to, and learn from vulnerability experiences, shaping future expectations, participation behaviors, and subsequent marketplace interactions. Responses are molded not only by structural accessibility conditions but also by relevant regulations at local, state, and federal levels and underlying cognitive and ideological or mindset orientations toward disability and accessibility (Adkins and Jae 2010; Baker and Mason 2012; Hill and Sharma 2020; McKeage, Crosby, and Rittenburg 2018; Mende et al. 2024).

Following vulnerability activation, the MCM-CV highlights how responses to vulnerability are shaped by the perspectives adopted by marketplace actors. While much of the consumer vulnerability literature has emphasized deficit-based approaches, which focus on limitations and needs, emerging research increasingly advocates for strengths-based perspectives emphasizing capabilities, agency, and resource mobilization (Raciti, Russell-Bennett, and Letheren 2022; Russell-Bennett et al. 2023). These differing perspectives influence how vulnerability unfolds over time, shaping both immediate marketplace outcomes and future participation. By incorporating the voices of multiple actors—including consumers, firms,

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policymakers, and communities—the model captures how vulnerability is negotiated across levels and contexts (Kubacki, Siemieniako, and Brennan 2020). This perspective also addresses concerns that objective measures of vulnerability used by marketers may not fully align with consumers' lived experiences (Mende et al. 2024), highlighting the importance of integrating subjective and structural perspectives.

In the context of consumers with non-apparent disabilities, repeated experiences of disclosure-triggered vulnerability can produce cumulative effects, including stress, withdrawal, and reduced participation in marketplace engagement (Machin et al. 2019). Required disclosure may lead consumers to avoid in-person interactions, disengage from certain marketplace environments, or selectively participate in ways that minimize exposure to stigma. Even when withdrawal does not occur, the process of navigating disclosure often generates significant emotional and cognitive strain (Beudaert, Gorge, and Herbert 2017). At the same time, the model highlights opportunities for more positive trajectories, particularly when marketplace actors adopt strengths-based approaches that reduce reliance on disclosure and support inclusive participation. In this way, vulnerability is not only a condition to be mitigated, but a dynamic process that can be reshaped through changes in marketplace structures and practices.

Strengths-based perspectives, a fundamental approach in the field of social work (Hill 2008) encapsulates the belief that individuals—those with and without nonapparent disabilities—possess a range of personal capabilities, adaptive skills, and cultural knowledge to navigate vulnerability experiences (Adkins and Jae 2010; Adkins and Ozanne 2005; Hamraie and Fritsch 2019; Hill and Sharma 2020). In contrast, deficit-based orientations, primarily reactive in nature, focus on the characteristics and skills individuals lack (Raciti, Russell-Bennett, and Letheren 2022). In the context of consumers with disabilities, deficit-based orientations may reinforce

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ableist assumptions and practices that further stigmatizes these consumers and shape how their needs are interpreted within marketplace interactions (Hamraie and Fritsch 2019; Nario-Redmond 2010; Quinn and Earnshaw 2013). Given the multitude of responses to vulnerability experiences, we argue actors at the micro-, meso-, and macro-levels are unlikely to rely solely on one orientation. Rather, marketplace actors likely employ a combination of approaches depending on contextual and resource constraints (Salisbury et al. 2023), suggesting strengths-based and deficit-based orientations occupy opposite ends of a continuum. However, although responses may reflect varying degrees of both orientations, the MCM-CV model proposes vulnerability responses frequently trend toward one orientation more strongly than the other.

At the micro-level

Strengths-based mindsets reflect orientations in which consumers draw upon personal capabilities, adaptive skills, and cultural knowledge to navigate vulnerability experiences (Adkins and Jae 2010; Adkins and Ozanne 2005; Hamraie and Fritsch 2019; Hill and Sharma 2020). Consumers adopting strengths-based orientations engage in active or defensive coping strategies allowing them to anticipate, resist, or reshape challenging marketplace interactions (Adkins and Ozanne 2005; Hill and Sharma 2020). These strategies include problem-solving, self-advocacy, and strategic disclosure decisions. At times, consumers proactively explain accessibility needs, assert legal accommodation rights, or prepare adaptive strategies prior to marketplace engagement (Baker, Gentry, and Rittenburg 2005). Strengths-based responses generate outcomes that increase perceived marketplace control and strengthen willingness to participate in future marketplace interactions (Adkins and Jae 2010; Hill and Sharma 2020).

In contrast, deficit-based mindsets reflect orientations in which consumers focus on perceived limitations and constraints associated with marketplace participation (Hiemstra and

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Van Yperen 2015; Maier and Seligman 2016). These responses often emerge in environments characterized by stigma, repeated accessibility failures, or limited perceived agency (Baker, Gentry, and Rittenburg 2005; Hill and Sharma 2020). Consumers operating from deficit-based orientations often adopt passive coping strategies such as avoiding disclosure or disengaging from inaccessible marketplace environments (Adkins and Jae 2010; Hill and Sharma 2020). Anticipated stigma frequently shapes disclosure decisions among consumers with non-apparent disabilities (Granjon et al. 2025; Hendry et al. 2022; Ladau 2021; Yu 2024). Paradoxically, these strategies reduce immediate social risk but often produce outcomes characterized by reduced self-efficacy and decreased marketplace participation (Baker, Gentry, and Rittenburg 2005; Baker and Mason 2012). Over time, deficit-based responses reinforce vulnerability trajectories, resulting in outcomes such as reduced marketplace participation, lower perceived control, and decreased perceptions of accessibility (Hill and Sharma 2020).

At the meso-level

The marketplace and marketplace actors operate in the meso-level. Those adopting strengths-based orientations prioritize accessibility as a design principle and center consumer capabilities and lived expertise (Johns and Davey 2021; Mende et al. 2024). Inclusive design practices emphasizing autonomy, flexibility, and usability across consumer needs are common in strengths-based marketplace responses (Lteif et al. 2025). These responses include incorporating universal design features such as flexible seating, accessible communication formats, and multi-channel service delivery options (Doussard et al. 2024; Treloar et al. 2022). Universal design is a particularly advantageous strategy because it develops equitable, flexible environments that can be utilized by the widest range of consumers without the need for accommodations, reducing asymmetric disclosure requirements and inaccessibility issues; consequently, the likelihood of

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future vulnerability decreases (Doussard et al. 2024; Treloar et al. 2022). Organizations adopting strengths-based perspectives frequently collaborate with disability advocacy groups and employ inclusive communication strategies such as consumer-directed interaction preferences (Mirabito et al. 2016; Swenson 2019).

In contrast, meso-level actors oriented towards deficit-based perspectives focus on perceived consumer limitations and frequently shift accessibility responsibility onto consumers rather than addressing structural barriers (Hiemstra and Van Yperen 2015; Maier and Seligman 2016; van der Sluis et al. 2025). Organizations operating from deficit-based perspectives implement accommodations only when triggered by regulatory compliance and generally fail to incorporate accessibility into service design systems. Responses from meso-level entities include minimizing accessibility investments, excluding consumers with disabilities from design processes, and implementing accessibility modifications without adequate training or infrastructure support (Grewal and van der Sluis 2024; Johansson et al. 2023; Kuppelwieser 2025). Stigmatizing communication strategies or inadequate privacy safeguards (Elliott et al. 2022; Global Display Solution 2025; Mende et al. 2024; Mirabito et al. 2016) are also possibilities. Such responses reinforce structural inequities and generate repeated vulnerability experiences (Baker, Gentry, and Rittenburg 2005; Baker and Mason 2012).

At the macro-level

Strengths-based responses also emerge through cultural practices within society and disability communities. A growing strengths-based movement challenges ableist language and marketplace structures and advances collective advocacy efforts promoting anti-ableist practices and inclusive design, exemplified by initiatives such as Runway of Dreams (McBee-Black 2024; McBee-Black and Ha-Brookshire 2022; Södergren and Vallström 2023; Yu 2024). When deficit-

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based mindsets are dominant, society and policy makers view consumers with non-apparent disabilities as burdens and reinforce disability stereotypes. Phuong (2017) argues regulations and policies in the U.S. frequently employ language reflecting deficit-oriented assumptions that imply consumers with disabilities need to be “fixed.”

Cross-Level Interactions and Recursive Feedback

Responses of consumers, marketplace actors, and public policy makers interact across marketplace levels to shape vulnerability outcomes (McKeage, Crosby, and Rittenburg 2018). Alignment between strengths-based orientations promotes inclusive participation and reduces vulnerability recurrence. Misalignment between orientations across the micro-, meso-, and macro-levels carries the potential to intensify vulnerability experiences and reinforce disclosure burdens. The feedback loop structure of the MCM-CV illustrates how these cross-level interactions shape outcomes, influencing future marketplace engagement expectations, disclosure decisions, and perceptions of accessibility reliability.

Within the feedback loop, consumers with non-apparent disabilities navigate distinct experience trajectories reflecting responses to accessibility barriers and disclosure decisions. These trajectories shape later outcomes, including participation patterns, disclosure preferences, and perceptions of market accessibility. Generally speaking, strengths-based coping orientations are more likely to result in adaptive participation strategies, self-advocacy, and sustained marketplace engagement despite barriers, whereas deficit-based orientations are more likely to result in withdrawal, avoidance of disclosure, and reduced future participation. Similarly, when disclosure occurs, strengths-based marketplace actor perspectives tend to translate disclosure into inclusive, autonomy-supportive accommodations, while deficit-based perspectives often produce minimal, compliance-driven responses that fail to support experiential inclusion.

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Experience trajectories describe *when* and *how* consumer vulnerability becomes salient. Disclosure prior to, during, or following marketplace interactions can generate marketplace triggers and reinforce vulnerability trajectories across future interactions. The model demonstrates how vulnerability trajectories are produced, reinforced, or disrupted through recursive interactions over time reflecting the on-going, *lived* experience of consumer vulnerability.

The MCM-CV model conceptualizes vulnerability as cumulative. Repeated marketplace encounters shape expectations, disclosure preferences, and coping orientations (Baker, Gentry, and Rittenburg 2005; Baker and Mason 2012). Repeated exposure to deficit-based responses may shift consumers toward disengagement, whereas repeated strengths-based encounters may reinforce resilience and advocacy. Finally, the MCM-CV distinguishes between systems that rely on disclosure-triggered accommodations and those grounded in proactive universal design (Doussard et al. 2024; Treloar et al. 2022). By formalizing cross-level alignment and misalignment, the model explains why similar accessibility barriers may produce divergent vulnerability trajectories. Alignment between strengths-based orientations can disrupt vulnerability feedback loops by fostering inclusive responses and reinforcing trust. In contrast, misalignment increases the likelihood of disclosure events generating marketplace triggers—revealing breakdowns in accessibility infrastructure, norms, or coordination—and thereby intensifying vulnerability across future interactions. Through cumulative learning processes, repeated exposure to asymmetric disclosure requirements reshapes consumer expectations, disclosure preferences, and coping orientations, embedding vulnerability or resilience into future marketplace participation.

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Discussion and Implications

As noted previously, consumer vulnerability is a recursive, learning-based process, not merely a discrete or episodic marketplace event. Disclosure-triggered vulnerability operates as a structural decision point in which marketplace actor awareness, accommodation feasibility, and stigma exposure are brought to light. This conceptualization of consumer vulnerability carries important policy implications for marketplace actors in the macro-, meso-, and micro-levels of marketplace interactions and helps marketplace actors identify strategic actions to provide an equitable environment for marketplace encounters. Importantly, the implications proposed below exist on a spectrum of both impact and feasibility: macro-level interventions may yield broader impact but face greater implementation constraints, whereas meso-level interventions may be enacted more quickly but vary in scale. Consumers at the micro level should be relieved of the burden of acting as primary enforcers of accessibility through complaints and litigation, as consumer-led enforcement may yield high but uneven impact, and remains low in feasibility.

At the Macro-Level

Public policymakers and other regulatory agencies can use the MCM-CV to identify where vulnerability is systematically activated through asymmetric disclosure requirements, particularly in contexts where access to goods and services is contingent on revealing disability diagnoses or other private personal information. In the current United States (U.S.) regulatory environment, large-scale federal reform aimed specifically at disabilities is unlikely in the near term. Instead, more feasible policy action is likely to occur through incremental extensions of existing frameworks and sub-federal initiatives. For example, state governments could expand public procurement requirements to include disclosure-independent access standards, requiring vendors to demonstrate how accommodations can be accessed without requiring repeated

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disclosure or justification. Similarly, federal agencies such as the Federal Trade Commission (FTC) could issue guidance clarifying when marketplace design practices that condition access of disclosure constitute unfair or discriminatory practices, particularly when less exclusionary alternatives are available. Over the longer term, broader regulatory reform—such as expanded Americans with Disabilities Act (ADA) interpretations or new legislation addressing non-apparent disabilities—remains possible but contingent on political prioritization and institutional support.

When the ADA became law, it did not—and arguably could not—anticipate the rapid expansion of the Internet and the emergence of digital spaces. Consequently, virtual environments were not explicitly addressed, leaving questions regarding digital accessibility largely to the courts. Today, covered entities grapple with ensuring digital spaces are accessible to disabled consumers in the absence of clear regulatory guidance defining what “accessible” means in a digital context. As a result, organizations retain considerable “flexibility” in how they comply with ADA requirements (U.S. Department of Justice 2022). In 2024, the Department of Justice (DOJ) issued a final rule establishing standards for state and local government websites and mobile applications to measure compliance with ADA accessibility requirements (U.S. Department of Justice 2024). Similarly, the European Accessibility Act (EAA) requires firms to ensure digital accessibility and carries the potential penalty of exclusion from the European Union (E.U.) market for noncompliance (European Commission 2021). While extending similar requirements to the private sector in the United States would increase consistency, near-term progress is more likely to occur through a combination of state-level regulation, judicial interpretations, and industry-led standards.

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Lawmakers and other regulatory agencies could also utilize the MCM-CV model to establish additional regulatory frameworks addressing the identified vulnerabilities. Frameworks could include architectural, digital, and business practice mandates to promote universal design and reduce reliance on disclosure. However, requiring firms to respond to consumer vulnerability without accompanying regulatory standards and enforcement mechanisms is unlikely to meet the needs of consumers with non-apparent disabilities. The implementation of the ADA in the U.S. illustrates how such frameworks function. The ADA required adherence to multiple standards governing public transit, workplaces, and businesses serving the public, along with guidance documents and regulations for employers, government entities, public accommodations, and other covered parties (U.S. Department of Justice n.d.). A new law addressing consumer vulnerability for people with non-apparent disabilities would require a similar ecosystem.

Regulatory ecosystems rely on industry-specific agencies to communicate and enforce accessibility requirements. In the U.S., the Office of Aviation Consumer Protection, within the Department of Transportation, summarizes relevant laws in the *Rights to Assistance at Airports and on the Aircraft* (U.S. Department of Transportation 2025). Similarly, the E.U. mandated accessible measures such as braille on medicinal packaging (European Commission 2023). More broadly, the European Accessibility Act (EAA), which took effect in June 2025, standardizes accessibility practices across the E.U. member states and establishes a framework through which member states hold organizations accountable for violations (European Commission 2025; European Commission 2021; European Union 2019).

Importantly, macro-level interventions may also occur at smaller scales. Individual states, cities, chambers of commerce, and industry associations can enact more stringent accessibility requirements for firms operating within their jurisdictions. For example, California imposes

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stricter accessibility standards by requiring state agencies to certify WCAG 2.0 Level AA compliance under Assembly Bill (AB) 434, while private firms are subject to the Unruh Civil Rights Act's broader disability access obligations (State of California 2026). While such sub-federal action may occur more quickly, it may also produce uneven protections and incentivize firms to operate in less restrictive environments. The MCM-CV therefore highlights the importance of expanding policy evaluation criteria beyond compliance toward experiential inclusion, participation quality, and sustained consumer outcomes.

Although policies are often developed through internal organizational processes and external stakeholder consultation, these approaches may still fall short of fully addressing the needs of consumers with non-apparent disabilities (Baker, Gentry, and Rittenburg 2005; Pavia and Mason 2014; Santuzzi et al. 2019). Reducing these vulnerabilities requires both proactively designing marketplaces to be more accessible and normalizing the provision of accommodations without requiring individuals to justify the legitimacy of their requests. Currently, in the U.S., people with disabilities are not legally required to disclose, yet in practice, disclosure often remains a prerequisite for access. The MCM-CV highlights non-apparent disability as a regulatory blind spot and underscores the need for policies that reduce reliance on disclosure while promoting consistent and enforceable accessibility standards.

At the Meso-Level

On the meso-level, the MCM-CV model highlights both process and structural actions necessary to develop a marketplace accessible for all consumers. The model demonstrates asymmetric disclosure requirements introduce complex privacy, stigma, and self-advocacy burdens that may discourage consumers from requesting accommodations. These forms of disclosure-triggered vulnerability frequently occur despite formal regulatory

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protections, revealing the need for improved accessibility reliability, employee training standards, and operational infrastructure. At the same time, the model also provides avenues for motivated firms to act proactively without waiting for regulators to enact new requirements. In this way, policy and practice changes at the meso-level have the potential to move more quickly than federal policies and regulations.

Rather than treating accessibility as an accommodation granted upon request, firms can implement default inclusion strategies minimizing or eliminating the need for disclosure. This includes embedding accessibility into service design (e.g., universally accessible digital interfaces), offering multiple low-burden pathways for accessing support, and establishing internal policies that shift responsibility from consumers to the organization. Industry associations and third-party certification bodies may further accelerate change by developing voluntary accessibility standards for non-apparent disabilities, creating reputational incentives for firms to exceed minimum legal requirements. In the near term, such organizational and industry-level actions represent the most practical and scalable pathway for reducing vulnerability, although they may produce uneven outcomes across firms and markets.

Importantly, some organizations are already demonstrating how these principles can be implemented effectively in practice. For example, Microsoft embeds accessibility directly into its products through its Inclusive Design framework, incorporating features such as screen readers, live captioning, immersive reading tools, and high-contrast interfaces available to all users without requiring disclosure (Microsoft n.d.-a, Microsoft n.d.-b). By shifting accessibility from an accommodation-based model to a default design standard, Microsoft reduces reliance on asymmetric disclosure requirements while improving usability for a broad range of consumers. In addition, built-in accessibility checkers within widely used applications (e.g., Word,

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PowerPoint) enable organizations to proactively design more inclusive content, extending accessibility beyond the firm to the broader marketplace ecosystem.

These firm-level efforts are increasingly supported and amplified by advocacy and industry organizations. For example, the Disability Index evaluates and benchmarks corporate disability inclusion practices, creating transparency and accountability for firms while incentivizing continuous improvement (Disability:IN 2025). Similarly, the World Institute on Disability works across policy and industry contexts to promote accessibility, inclusive design, and equitable participation (World Institute on Disability n.d.). Together, these actors help translate accessibility from a compliance requirement into a competitive and reputational advantage, accelerating the diffusion of inclusive practices across industries.

Because the MCM-CV conceptualizes vulnerability as cumulative and recursive rather than episodic, it enables firms to anticipate where vulnerability is likely to emerge, even in the absence of regulatory violations. Firms should therefore conduct critical audits of service processes to identify areas where asymmetric disclosure requirements persist and redesign those processes to reduce stigma and friction. While larger firms may have greater resources to implement such changes, it is equally important for smaller organizations to progress toward increasing accessibility (ADA National Network 2025). Government agencies and non-profit organizations can play a key role by providing resources and guidance to support enterprises of all sizes.

With the many technological advances being used in marketplaces today, firms must also consider how digital tools shape interactions (Sommerfield et al. 2025). When disclosure remains necessary, companies should offer multiple accessible channels (e.g., phone, digital, in-person), recognizing no single method works for all consumers. Firms should also clearly communicate

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available accommodations and how to access them. By embedding accessibility into core operations and communication practices, meso-level actors can meaningfully reduce reliance on disclosure and improve participation outcomes for consumers with non-apparent disabilities.

At the Micro-Level

Consumers with apparent and non-apparent disabilities face ongoing decisions about whether, when, and how to disclose their condition in order to participate in the marketplace. For consumers with non-apparent disabilities, in particular, this creates additional cognitive, emotional, and social burdens, as disclosure carries risks related to stigma, disbelief, and differential treatment (Beudaert, Gorge, and Herbert 2017). Additionally, consumers must actively manage different risks of harm associated with whether or not to disclose their disability. These decisions shape not only the immediate experiences but also future participation, as repeated exposure to disclosure-triggered vulnerability may lead to reduced engagement or selective avoidance of certain firms or sectors (Hill and Sharma 2020).

Inaccessible marketplaces also generate emotional strain, as consumers must anticipate whether they will be able to participate fully, partially, or not at all, and how others may respond upon learning of their disability (Baker, Holland, and Kaufman-Scarborough 2007; Beudaert, Gorge, and Herbert 2017; Joachim and Acorn 2000; Quinn and Earnshaw 2013; Vice et al. 2020). For consumers with apparent disabilities, disclosure decisions often center on timing, whereas consumers with non-apparent disabilities must also decide whether to disclose at all. As disability rights advocate, Tiffany Yu (2024, p. 10) explains, individuals with non-apparent disabilities may have the “privilege to choose whether to disclose” but this choice introduces additional burdens associated with managing identity access.

Integrative Implications

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Consumers can demand greater accountability from marketplace actors through complaints, public pressure, or litigation, but such actions require time, financial resources, and emotional resilience. Importantly, these efforts often require repeated disclosure, thereby reinforcing the very vulnerability they seek to address. As a result, consumer-driven enforcement produces uneven outcomes, privileging those with greater resources or tolerance for disclosure-related risks. The MCM-CV therefore emphasizes shifting accountability upstream—to organizations and policymakers—by reducing reliance on disclosure as a prerequisite for access.

To summarize, the MCM-CV, as applied to the vulnerability of consumers with non-apparent disabilities, illustrates both positive and negative implications for consumers, firms, and policymakers. While macro-level change remains important, it is likely to emerge more slowly because regulatory and political change often requires substantial coordination, prioritization, and institutional support. In contrast, the greatest opportunity for meaningful near-term change appears at the meso-level, where organizations and industry actors can redesign systems, reduce reliance on disclosure, and implement inclusive practices at scale.

Importantly, emerging examples demonstrate accessibility need not remain solely a compliance exercise. Organizations such as Microsoft illustrate how accessibility can be embedded as a default organizational capability through inclusive design practices that reduce reliance on disclosure while improving usability for a broad range of consumers (Microsoft n.d.-a; Microsoft n.d.-b). Similarly, advocacy and benchmarking organizations such as Disability:IN and the World Institute on Disability can amplify and diffuse these efforts by identifying best practices, increasing transparency, and promoting accountability across industries (Disability:IN 2025; World Institute on Disability n.d.). Research also plays a critical role in supporting these

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efforts by documenting the outcomes of inclusive design initiatives and generating evidence regarding their effects on participation, engagement, and firm performance.

For consumers who have long navigated marketplaces under conditions of asymmetric disclosure requirements, meaningful changes in marketplace accessibility may require time to reshape expectations and experiences. However, as accessibility and inclusion become increasingly normalized, marketplaces may shift from systems that inadvertently reinforce vulnerability toward environments that foster participation, dignity, and empowerment. Over time, reducing disclosure-triggered vulnerability may strengthen not only marketplace engagement, but also consumers' relationships with disability identity through greater feelings of acceptance, value, and belonging.

Future Research

We view the MCM-CV as a descriptive model explaining how antecedents, asymmetrical disclosure requirements, marketplace responses, and resulting outcomes and their consequences interact to shape consumer vulnerability among individuals with non-apparent disabilities. Throughout the model development, we emphasize adopting a social, strengths-based perspective enhances our understanding of how consumers experience vulnerability. In the model, asymmetric disclosure requirements represent a vulnerability-triggering event for consumers with non-apparent disabilities. We expect similar triggering events to occur in other contexts where consumer vulnerability arises. For example, consumers experiencing vulnerability due to extreme weather events, a death of a loved one, a divorce, or identity-disrupting events may be reluctant to disclose personal circumstances when seeking assistance.

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Requiring consumers to reveal private or potentially stigmatizing information to gain access to the marketplace raises important ethical and policy concerns.

Torres (2025) encouraged marketing academicians and the *Journal of Public Policy & Marketing* to pursue scholarship that increases market access and employment opportunities for people with disabilities through strengths-based perspectives recognizing the contributions these individuals make. We answer this call by highlighting the challenges faced by consumers with non-apparent disabilities. The MCM-CV provides a useful framework for such research. Although many research questions emerge from the model, space constraints prevent an exhaustive discussion. Below, we offer illustrative examples across levels of analysis and their interactions, with additional questions summarized in Table 1.

At the Micro-Level

At the micro-level, future research should clarify the impact of asymmetric disclosure requirements. Additional work could extend research on disclosure through technological systems, particularly focusing on consumer awareness of how personal information is stored, tracked, and used. While sectors such as healthcare and education include formal protections for personally identifiable information (although not always perfect), retail marketplaces, both brick and mortar and digital, may lack comparable safeguards. Given the prevalence of data breaches and uneven privacy regulations across countries, research is needed to understand what happens when disability-related information is disclosed within marketplace interactions.

Scholars may also examine how disclosure affects different stages of the turbulent consumer journey (Mirabito et al. 2025) and when the consumer chooses to disclose or withhold personal information relevant to the consumption task. Another important direction involves examining how consumer responses evolve over time. Baker and Mason (2012) propose

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consumers may develop resilience through repeated experiences of vulnerability; however, additional research is needed to identify when resilience develops and when repeated vulnerability instead produces fatigue, disenfranchisement, or eventual market exit.

At the Meso-Level

On the meso-level, research could examine organizational actions and structural changes that reduce the need for disclosure or make disclosure processes less burdensome for consumers. Studies might evaluate the effectiveness of approaches designed to minimize disclosure requirements, including universal design practices. More work is needed to determine best practices for situations in which disclosure remains necessary, including how information is collected, stored, accessed, and protected. This line of inquiry should also consider employee training, internal protocols, and organizational cultures surrounding disclosure. Another important avenue involves examining strategies firms can use to rebuild or repair trust and relationships with consumers who have withdrawn from the marketplace due to prior stigmatizing or inaccessible experiences.

At the Macro-Level

On the macro-level, research needs to investigate regulatory approaches designed to protect vulnerable consumer groups. Historical and comparative studies may help determine the effectiveness of regulations developed from strengths-based vs. deficit-based perspectives, particularly by evaluating their implementation as well as intended and unintended consequences. Additionally, research should investigate the impact of including affected consumer groups in policy-making processes, as such participation may improve the design and legitimacy of accessibility regulations.

Cross-Level Interactions

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The greatest potential for transformative contributions lies in examining interactions between the micro-, meso-, and macro-levels. Actions taken within one level shape responses, restructuring efforts, and regulatory demands at other levels. Research examining these cross-level dynamics would provide insight into the evolution of marketplace practices over time. Particularly, identifying trajectories which allow consumers with non-apparent disabilities to navigate marketplaces free from stigma and discrimination remains an important priority. As Ltief et al. (2025) discuss, tensions arise when actions on one level conflict with responses at another level. In an ableist society, actors across levels may hold misaligned understandings of disability, especially regarding non-apparent disabilities. Future research could examine barriers preventing broader adoption of social marketing campaigns and strengths-based perspectives towards disability. Scholars might also investigate the role of professional organizations and advocacy groups in mediating these tensions, coordinating cross-level responses, and evaluating the effectiveness of their interventions. Addressing these questions is critical, as consumers with non-apparent disabilities continue to face vulnerability arising from disclosure requirements in marketplace interactions. Table 1 gives scholars a road map of future research questions to pursue. Additionally, several propositions, from the development of the MCM-CV model, upon which testable hypotheses could be derived appear in Web Appendix B.

Table 1: Additional Research Questions of Interest

Level	Research Question	Topics
Micro-	How does the timing of disclosure affect consumers' felt dignity, perceived vulnerability, and transaction completion? Is this effect moderated by firms' strengths-based vs. deficit-based approaches?	Disclosure Consumer Well-Being Vulnerability Strengths-based v. Deficit-based
	How do other consumer groups impacted by disclosure respond to brand attempts to become more accessible to consumers with disabilities	Disclosure Accessibility Consumer Well-Being

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	(i.e., do they also feel welcomed and empowered)?	
	How do the experiences of consumers with non-apparent disabilities compare to those with apparent disabilities, in response to brand adoption of accessibility guidelines?	Non-Apparent v. Apparent Accessibility
	Do non-disabled consumers respond positively or negatively to universal design measures meant to benefit disabled consumers?	Non-Disabled Universal Design
	Does an accessible environment and disability-inclusive messaging increase voluntary disclosure or identity among consumers as a point of pride when in an inclusive business?	Accessibility Voluntary Disclosure
Meso-	Do universal design interventions (e.g., quieter zones, multiple checkout channels, clearer information formats) reduce the frequency/necessity of disclosure for people with non-apparent disabilities and, in turn, shift consumers onto more adaptive trajectories?	Universal Design Disclosure Non-Apparent Adaptive Trajectories
	How does the consumer shift to more adaptive trajectories impact their relationship with the brand (e.g., brand loyalty, purchase intent, word-of-mouth)?	Adaptive Trajectories Consumer-Brand Relationship
	When a leading brand undertakes voluntary accessibility measures above and beyond bare legal compliance, what factors contribute to the practice catching on with peers and competitors?	Accessibility Self-Regulation Impact of Market Leaders
	How can companies take disability inclusion across their supply chains and across all levels of employment to really drive disability inclusion?	Supply Chain Inclusion
	How do market leaders in inclusive design impact sector-wide accommodations for consumers with non-apparent disabilities?	Impact of Market Leaders
	What are the effects (positive, negative or neutral) of the adoption of universal design interventions on those without disabilities and their perceptions towards the brands that adopt them?	Universal Design Non-Disabled Consumer-Brand Relationship
	What factors prevent industries from self-regulating, in terms of proactively developing and implementing accessibility mandates?	Accessibility Self-Regulation

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Macro-	How do sector-level accessibility mandates shift industry-wide accessibility compliance and ADA litigation volume?	Accessibility Mandates ADA Litigation
	Do national digital-accessibility standards (e.g., WCAG adoption into law) improve web accessibility scores at scale?	Accessibility Standards Accessibility Outcomes
	Does public funding for accessibility enforcement <i>predict</i> market-wide accessibility outcomes and complaint resolution speed?	Accessibility Enforcement Accessibility Outcomes
	How do <i>media/policy discourse</i> about non-apparent disabilities influence <i>macro indicators</i> ?	Media Impact
	How can multi-national companies create universal and shared experiences among disabled consumers globally? Is an international legal standard needed for them?	International Impact International Standards
	As brands implement policies and procedures which reduce the need for disclosure, and empower the disability community, how does this impact societal attitudes toward, and stigma felt by, individuals with disabilities?	Accessibility Standards Disclosure Consumer Well-Being
	When the federal landscape on DEI initiatives shifted, and companies rolled back their voluntary disability inclusion, were there any negative effects to earnings, customer attendance, etc.?	Federal View on DEI Business Financials
	What are the downsides of either allowing brands to self-regulate or waiting on governments to intervene? Are customers left in limbo when businesses change their minds, in comparison to government regulations, which are thought to be more stable?	Industry Self-Regulation v. Federal Mandate
Cross-level Interactions	Does the impact of a firm's universal design on disclosure frequency depend on a consumer's disclosure preference or stigma sensitivity?	Universal Design Disclosure Stigma Sensitivity
	How does inclusive design support the UN's Sustainable Development Goals?	Inclusive Design UN SDGs
	How does the management of consumer disability data impact consumers' attitudes and behavioral intentions toward brands?	Data Privacy Consumer-Brand Relationship
	How do third parties supporting consumers with disabilities shape the consumer's lived experience?	Consumer Well-Being
	Do macro protections (e.g., digital accessibility rules) reduce disclosure requirements and is	Accessibility Mandates Disclosure

	this effect <i>stronger</i> for consumers with higher sensory sensitivities, thereby improving satisfaction/loyalty?	Stigma Sensitivity Consumer-Brand Relationship
	How does the way the media frames universal design interventions impact micro- (disabled vs non-disabled), meso- (firms willingness to adopt certain designs), and macro- (policy approaches/political will to intervene) interactions?	Media Impact Universal Design
	How does a nation’s culture toward people with disabilities shape firms’ inclusive design practices?	Cultural Impact Inclusive Design
	Do stronger macro-accessibility regimes (laws/standards/enforcement intensity) amplify the effect of meso-level firm practices (universal design, staff training) on micro-level outcomes (felt dignity, trust, repeat patronage) among consumers with non-apparent disabilities?	Federal Mandates Universal Design Consumer-Brand Relationship

In Summary

The Marketplace Conduction Model of Consumer Vulnerability (MCM-CV) proposed in this manuscript extends existing consumer vulnerability theory in several important ways. Building upon prior work (e.g., Baker, Gentry, and Rittenburg 2005; Baker and Mason 2012; Hill and Sharma 2020) this research introduces new conceptual mechanisms, clarifies the temporal dynamics of vulnerability, and identifies boundary conditions shaping marketplace participation among consumers with non-apparent disabilities. By reconceptualizing vulnerability as a recursive, learning-based process rather than a discrete or episodic marketplace event, the model advances consumer vulnerability theory. Specifically, the Pre-Experience, Market Experience, and Post-Experience phases illustrate how vulnerability outcomes shape future expectations, coping strategies, and marketplace engagement decisions. In doing so, the model extends the global framework of consumer vulnerability proposed by Hill and Sharma

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(2020) and complements recent models recognizing that consumer vulnerability unfolds across multiple time periods (Mende et al., 2024; Salisbury 2023).

A key contribution of the MCM-CV is conceptualizing disclosure timing as a central mechanism shaping consumer vulnerability trajectories. Disclosure operates as a structural decision point influencing marketplace actor awareness, the feasibility of accommodation, and exposure to stigma. Importantly, the MCM-CV also distinguishes between accessibility compliance and more robust inclusion, expanding vulnerability theory to incorporate quality of participation, belonging, and engagement within marketplace interactions.

Globally, the number of people affected by disabilities continues to grow (World Health Organization 2023), increasing the size and importance of markets that include consumers with non-apparent disabilities. Disability is a near-universal human experience; individuals will encounter disability either firsthand or with someone they know at some point in their lives. Etmanski (2020) estimates more than 57% of the population has a connection to someone with a disability, representing disposable income exceeding \$8 trillion. In this manuscript we conceptualized the MCM-CV as a way to better understand the lived experiences of consumers with non-apparent disabilities. This understanding helps consumers gain greater agency in the marketplace, guides businesses in designing services that minimize vulnerability triggering disruptions and supports policy makers in developing regulations that expand access and inclusion.

Although progress toward accessibility has been gradual, the demand for inclusive marketplaces continues to intensify. More than thirty-five years after the passage of the Americans with Disabilities Act— widely regarded as the world's first comprehensive civil rights law protecting people with disabilities—many consumers with both non-apparent and

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apparent disabilities still encounter inaccessible marketplaces. Therefore, we encourage fellow scholars to investigate the mechanisms proposed in the MCM-CV and identify where breakdowns across interpersonal interactions, organizational service design, and regulatory environments. Such research will illuminate the processes through which consumer vulnerability persists and helps create more accessible and inclusive marketplaces, for ALL.

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References

- ADA National Network (2025), "The ADA and Small Business," <https://adata.org/factsheet/ada-and-small-business>.
- Adkins, Natalie Ross and Haeran Jae (2010), "Marketplace Vulnerability of Limited English Proficient Consumers: Opportunities to Increase Knowledge in Micromarketing," *Journal of Macromarketing*, 30 (1), 93-104.
- Adkins, Natalie Ross and Julie L. Ozanne (2005), "The Low Literate Consumer," *Journal of Consumer Research*, 32 (1), 93-105.
- Aksoy, Lerzan, Linda Alkire, Sunmee Choi, Peter Beomcheol Kim, and Lu Zhang (2019), "Social Innovation in Service: A Conceptual Framework and Research Agenda," *Journal of Service Management*, 30 (3), 429-48.
- Baker, Stacey Menzel (2009), "Vulnerability and Resilience in Natural Disasters: A Marketing and Public Policy Perspective," *Journal of Public Policy & Marketing*, 28 (1), 114-23.
- Baker, Stacey Menzel, James W. Gentry, and Terri L. Rittenburg (2005), "Building Understanding of the Domain of Consumer Vulnerability," *Journal of Macromarketing*, 25 (2), 128-39.
- Baker, Stacey Menzel, Jonna Holland, and Carol Kaufman-Scarborough (2007), "How Consumers with Disabilities Perceive "Welcome" in Retail Servicescapes: A Critical Incident Study," *Journal of Services Marketing*, 21 (3), 160-73.
- Baker, Stacey Menzel and Marlys Mason (2012), "Toward a Process Theory of Consumer Vulnerability and Resilience: Illuminating its Transformative Potential," in *Transformative Consumer Research for Personal and Collective Well-Being*, David Glen Mick, Simone Pettigrew, Cornelia Pechmann, and Julie L. Ozanne eds. Routledge, 543-63.
- Beudaert, Anthony, Hélène Gorge, and Maud Herbert (2017), "An Exploration of Servicescapes' Exclusion and Coping Strategies of Consumers with "Hidden" Auditory Disorders," *Journal of Services Marketing*, 31 (4-5), 326-38.
- Bhagal-Nair, Anoop, Andrew M. Lindridge, Mark Tadajewski, Mona Moufahim, Daniela Alcoforado, Mohammed Cheded, Bernardo Figueiredo, and Chihling Liu (2024), "Disability and Well-Being: Towards a Capability Approach for Marketplace Access," *Journal of Marketing Management*, 40 (5-6), 512-41.
- Boenigk, Silke, Aaron A. Kreimer, Annika Becker, Linda Alkire, Raymond P. Fisk, and Sertan Kabadayi (2021), "Transformative Service Initiatives: Enabling Access and Overcoming Barriers for People Experiencing Vulnerability," *Journal of Service Research*, 24 (4), 542-62.

Author Accepted Manuscript

- Centers for Disease Control and Prevention (2025), "Data Guides: Status and Types," https://www.cdc.gov/dhds/data-guides/status-and-types.html#cdc_data_surveillance_section_1-disability-status.
- Chen, Rui (2013), "Living a Private Life in Public Social Networks: An Exploration of Member Self-Disclosure," *Decision Support Systems*, 55 (3), 661-68.
- Cross, Samantha NN and Akon E. Ekpo (2025), "When Marketplaces Fail: How Market Challenged Consumers Navigate the Marketplace," *Journal of the Academy of Marketing Science*, 53 (2), 513-32.
- Disability:IN. (2025), "2025 Disability Index Report," <https://disabilityin.org/resource/disability-index/>.
- Dolan, Vera L. B. (2023), "...But if You Tell Anyone, I'll Deny We Ever Met: The Experiences of Academics with Invisible Disabilities in the Neoliberal University," *International Journal of Qualitative Studies in Education*, 36 (4), 689-706.
- Doussard, Claire, Emmanuelle Garbe, Jeremy Morales, and Julien Billion (2024), "Universal Design for the Workplace: Ethical Considerations Regarding the Inclusion of Workers with Disabilities," *Journal of Business Ethics*, 194 (2), 285-96.
- Drake, Carly, Mehdi Mourali, and Kelly J. Pender (2025), "Mental Illness as Consumer Vulnerability: Ambivalent Attachment to the College Campus," *Journal of Marketing Management*, 41 (17-18), 1779-815.
- DuBois, Lindsay A., Valerie Bradley, and Nilüfer Isvan (2025), "An Observational Investigation of Unemployment, Underemployment, and Competitive Integrated Employment of People with Intellectual and Developmental Disabilities in 2021–2022," *Disability and Health Journal*, 18 (3), 101620.
- Elliott, Karen, Kovila Coopamootoo, Edward Curran, Paul Ezhilchelvan, Samantha Finnigan, Dave Horsfall, Zhichao Ma, Magdalene Ng, Tasos Spiliotopoulos, Han Wu, and Aad van Moorsel (2022), "Know Your Customer: Balancing Innovation and Regulation for Financial Inclusion," *Data & Policy*, 4 (e34).
- Etmanksi, Al (2020), *The Power of Disability: 10 Lessons for Surviving, Thriving, and Changing the World*. Berrett-Koehler Publishers.
- European Commission (2025), "The EU Becomes More Accessible for All," *Directorate-General for Communication* (July 31), https://commission.europa.eu/news-and-media/news/eu-becomes-more-accessible-all-2025-07-31_en.
- European Commission (2023), "Guideline on the Packaging Information of Medicinal Products for Human Use Authorised by the Union (Revision 14.8)" *Directorate-General for Health and Food Safety*, https://health.ec.europa.eu/system/files/2023-09/2018_packaging_guidelines_en_1.pdf/.

Author Accepted Manuscript

European Commission (2021), “European Accessibility Act,” https://commission.europa.eu/strategy-and-policy/policies/justice-and-fundamental-rights/disability/european-accessibility-act-eaa_en.

European Union (2019), Directive (EU) 2019/882 of the European Parliament and of the Council of 17 April 2019 on the Accessibility Requirements for Products and Services, Document 32019L0882, <https://eur-lex.europa.eu/eli/dir/2019/882/oj/eng>.

Fisk, Raymond P., Alison M. Dean, Linda Alkire, Alison Joubert, Josephine Previte, Nichola Robertson, and Mark Scott Rosenbaum (2018), “Design for Service Inclusion: Creating Inclusive Service Systems by 2050,” *Journal of Service Management*, 29 (5), 834-58.

Gartland, Sara, Paul Flynn, Maria Ana Carneiro, Greg Holloway, Jose de Sousa Fialho, Joe Cullen, Emma Hamilton, Amy Harris, and Clare Cullen (2022), “The State of Web Accessibility for People with Cognitive Disabilities: A Rapid Evidence Assessment,” *Behavioral Sciences*, 12 (2), 26.

Gergen, Kenneth J., Sheila McNamee, and Frank J. Barrett (2001), “Toward Transformative Dialogue,” *International Journal of Public Administration*, 24 (7-8), 679-707.

Global Display Solution (2025). “Why Grocery Stores Regularly Rearrange Their Layouts (And Why It Works),” <https://www.theglobaldisplaysolution.com/blog/why-grocery-stores-regularly-rearrange-their-layouts-and-why-it-works/>.

Gotti, David, Ernesto Morales, François Routhier, Jonathan Riendeau, and Ahmed Hadj Hassen (2024), “Dehumanizing Air Travel: A Scoping Review on Accessibility and Inclusion of People with Disabilities in International Airports,” *Frontiers in Rehabilitation Sciences* 5, 1305191.

Granjon, Marine, Nicolas Pillaud, Maria Popa-Roch, Benoite Aubé, and Odile Rohmer (2025), “Attitudes Towards Invisible Disabilities: Evidence from Behavioral Tendencies,” *Current Research in Behavioral Sciences*, 8, 100164.

Grewal, Lauren and Helen van der Sluis (2024), “Hidden Barriers to Marketplace Disability Accessibility: An Empirical Analysis of the Role of Perceived Trade-Offs,” *Journal of Consumer Research*, 51 (1), 66-78.

Hamraie, Aimi and Kelly Fritsch (2019), “Crip Technoscience Manifesto,” *Catalyst: Feminism, Theory, Technoscience*, 5 (1), 1-33.

Hassard, Juliet, Mehmet Yildirim, Louise Thomson, and Holly Blake (2024), “Disclosing Non-Visible Disabilities in Educational Workplaces: A Scoping Review,” *British Medical Bulletin*, 150 (1), 23-41.

Hendry, Gillian, Claire Wilson, Mairi Orr, and Rebecca Scullion (2022), “‘I Just Stay in the House so I Don’t Need to Explain’: A Qualitative Investigation of Persons with Invisible Disabilities,” *Disabilities*, 2 (1), 145-63.

Author Accepted Manuscript

- Hiemstra, Djoerd and Nico W. Van Yperen (2015), "The Effects of Strength-Based Versus Deficit-Based Self-Regulated Learning Strategies on Students' Effort Intentions," *Motivation and Emotion*, 39 (5), 656-68.
- Higgins, Leighanne (2020), "Psycho-Emotional Disability in the Marketplace," *European Journal of Marketing*, 54 (11), 2675-95.
- Hill, Katharine (2008), "A Strengths-Based Framework for Social Policy: Barriers and Possibilities," *Journal of Policy Practice*, 7 (2-3), 106-21.
- Hill, Ronald Paul and Eesha Sharma (2020), "Consumer Vulnerability," *Journal of Consumer Psychology*, 30 (3), 551-70.
- Joachim, Gloria and Sonia Acorn (2000), "Stigma of Visible and Invisible Chronic Conditions," *Journal of Advanced Nursing*, 32 (1), 243-48.
- Johansson, Stefan., Per-Olof Hedvall, Mia Larsson, Thomas P. Larsson, and Catharina Gustavsson (2023), "Co-Designing with Extreme Users: A Framework for User Participation in Design Processes," *Scandinavian Journal of Disability Research*, 25 (1), 418-30.
- Johns, Raechel and Janet Davey (2021), "Guest Editorial: Solving Problems for Service Consumers Experiencing Vulnerabilities: A Marketplace Challenge," *Journal of Services Marketing*, 35 (6), 685-91.
- Kaufman-Scarborough, Carol (2000), "Seeing Through the Eyes of the Color-Deficient Shopper: Consumer Issues for Public Policy," *Journal of Consumer Policy*, 23 (4), 461-92.
- Kubacki, Krzysztof, Dariusz Siemieniako, and Linda Brennan (2020), "Building Positive Resilience Through Vulnerability Analysis," *Journal of Social Marketing*, 10 (4), 471-88.
- Kuppelwieser, Volker (2025), "The Inclusion Delusion: Service Research's Dangerous Disconnect from Disabled Reality," *Journal of Services Marketing*, 39 (8), 1025-38.
- Ladau, Emily (2021), *Demystifying Disability: What to Know, What to Say, and How to be an Ally*. Ten Speed Press.
- Lteif, Lama, Helen van der Sluis, Lauren G. Block, Luca Cian, Vanessa M. Patrick, and Maura L. Scott (2025), "Creating Equity by Design: A Conceptual Framework for Marketplace Inclusion," *Journal of Public Policy & Marketing*, 44 (2), 214-31.
- Machin, Jane E., Natalie Ross Adkins, Elizabeth Crosby, Justine Rapp Farrell, and Ann M. Mirabito (2019), "The Marketplace, Mental Well-Being, and Me: Exploring Self-Efficacy, Self-Esteem, and Self-Compassion in Consumer Coping," *Journal of Business Research*, 100, 410-20.
- Maier, Steven F. and Martin E.P. Seligman (2016), "Learned Helplessness at Fifty: Insights from Neuroscience," *Psychological Review*, 123 (4), 349-67.

Author Accepted Manuscript

- Manno, Christine M., Rachel Glade, Lynn C. Koch, Lauren S. Simon, Phillip D. Rumrill, and Christopher C. Rosen (2024), "Disability Disclosure as an Impression Management Technique Used in the Workplace: A Grounded Theory Investigation," *Work*, 78 (2), 219-33.
- Marangoni, Vivian Silva Lima, Sofia Batista Ferraz, Andres Rodriguez Veloso, Diogo Fajardo Nunes Hildebrand, and Lealis Vaz Meleiro Lopes (2025), "It's a Non-binary World (After All): The Effect of Intersectionality on Transgender Consumers Experiencing Vulnerability," *Journal of Macromarketing*, 45 (1), 227-42.
- Mason, Marlys and Stacey Menzel Baker (2014), "Beyond Vulnerability: Building Resilient Consumers and Communities," *Advances in Consumer Research*, 42, 7-11.
- Mason, Marlys J. and Teresa Pavia (2015), "Health Shocks, Identity and Consumer Vulnerability," in *Consumer Vulnerability*. Routledge, 145-56.
- McBee-Black, Kerri (2024), "The Role of an Advocate in Innovating the Adaptive Apparel Market: A Case Study," *Clothing and Textiles Research Journal*, 42 (1), 69-83.
- McBee-Black, Kerri, and Jung E. Ha-Brookshire (2022), "'I Am Going to Educate the Industry': How an Advocate Became a Key Competitive Resource for the Adaptive Apparel Market," *Journal of Fashion Marketing and Management: An International Journal*, 26 (1), 179-94.
- McKeage, Kim, Elizabeth Crosby, and Terri Rittenburg (2018), "Living in a Gender-Binary World: Implications for a Revised Model of Consumer Vulnerability," *Journal of Macromarketing*, 38 (1), 73-90.
- Melzner, Johann, Andrea Bonezzi, and Tom Meyvis (2023), "Information Disclosure in the Era of Voice Technology," *Journal of Marketing*, 87 (4), 491-509.
- Mende, Martin, Tonya Williams Bradford, Anne L. Roggeveen, Maura L. Scott, and Mariella Zavala (2024), "Consumer Vulnerability Dynamics and Marketing: Conceptual Foundations and Future Research Opportunities," *Journal of the Academy of Marketing Science*, 52 (5), 1301-22.
- Mick, David Glen (2006), "Meaning and Mattering Through Transformative Consumer Research," *Advances in Consumer Research*, 33 (1), 1-4.
- Mick, David Glen, Simone Pettigrew, Cornelia Pechmann, and Julie L. Ozanne (2012), "Origins, Qualities, and Envisionments of Transformative Consumer Research," in *Transformative Consumer Research for Personal and Collective Well-Being*. Routledge, 3-24.
- Microsoft. (n.d.-a). "Microsoft Inclusive Design," <https://inclusive.microsoft.design/>.
- Microsoft. (n.d.-b). "Accessibility," <https://www.microsoft.com/en-us/accessibility>.

Author Accepted Manuscript

- Mirabito, Ann M., Justine Rapp Farrell, Jane E. Machin, Elizabeth Crosby, and Natalie Ross Adkins (2025), "Hijacked, Blindfolded, and Handcuffed: Navigating the Turbulent Consumer Journey for Mental Illness Treatment Services," *Journal of the Academy of Marketing Science*, 53 (6), 1644-69.
- Mirabito, Ann M., Cele C. Otnes, Elizabeth Crosby, David B. Wooten, Jane E. Machin, Chris Pullig, Natalie Ross Adkins, Susan Dunnett, Kathy Hamilton, Kevin D. Thomas, Marie A. Yeh, Cassandra Davis, Johanna F. Gollnhofer, Aditi Grover, Jess Matias, Natalie A. Mitchell, Edna G. Ndichu, Nada Sayarh, and Sunaina Velagaleti (2016), "The Stigma Turbine: A Theoretical Framework for Conceptualizing and Contextualizing Marketplace Stigma," *Journal of Public Policy & Marketing*, 35 (2), 170-84.
- Mitra, Sophie, Michael Palmer, Hoolda Kim, Daniel Mont, and Nora Groce (2017), "Extra Costs of Living with a Disability: A Review and Agenda for Research," *Disability and Health Journal*, 10 (4), 475-84.
- Mont, Daniel (2023), "Estimating the Extra Disability Expenditures for the Design of Inclusive Social Protection Policies," *Frontiers in Rehabilitation Sciences*, 4, 1179213.
- Nario-Redmond, Michelle R. (2010), "Cultural Stereotypes of Disabled and Non-Disabled Men and Women: Consensus for Global Category Representations and Diagnostic Domains," *British Journal of Social Psychology*, 49 (3), 471-88.
- Patrick, Vanessa M. and Candice R. Hollenbeck (2021), "Designing for All: Consumer Response to Inclusive Design," *Journal of Consumer Psychology*, 31 (2), 360-81.
- Pavia, Teresa M. and Marlys J. Mason (2014), "Vulnerability and Physical, Cognitive, and Behavioral Impairment: Model Extensions and Open Questions," *Journal of Macromarketing*, 34 (4), 471-85.
- Phuong, Jennifer (2017), "Disability and Language Ideologies in Education Policy," *Working Papers in Educational Linguistics*, 32, 1, 47-66.
- Poon, Brenda T. and Lorienne M. Jenstad (2022), "Communication with Face Masks During the COVID-19 Pandemic for Adults with Hearing Loss," *Cognitive Research: Principles and Implications*, 7 (1), 24.
- Quinn, Diane M., and Stephenie R. Chaudoir (2009), "Living with a Concealable Stigmatized Identity: The Impact of Anticipated Stigma, Centrality, Salience, and Cultural Stigma on Psychological Distress and Health," *Journal of Personality and Social Psychology*, 97 (4), 634-51.
- Quinn, Diane M. and Valerie A. Earnshaw (2013), "Concealable Stigmatized Identities and Psychological Well-Being," *Social and Personality Psychology Compass*, 7 (1), 40-51.

Author Accepted Manuscript

- Raciti, Maria M., Rebekah Russell-Bennett, and Kate Letheren (2022), "A Strengths-Based Approach to Eliciting Deep Insights from Social Marketing Customers Experiencing Vulnerability," *Journal of Marketing Management*, 38 (11-12), 1137-77.
- Riedel, Aimee, Amanda Beatson, and Stacey Menzel Baker (2025), "Beyond the Individual: Rethinking Vulnerability Across Ecosystems," *Journal of Services Marketing*, 39 (6), 585-95.
- Russell-Bennett, Rebekah, Nick Kelly, Kate Letheren, and Kathleen Chell (2023), "The 5R Guidelines for a Strengths-Based Approach to Co-Design with Customers Experiencing Vulnerability," *International Journal of Market Research*, 65 (2-3), 167-82.
- Salisbury, Linda Court, Gergana Y. Nenkov, Simon J. Blanchard, Ronald Paul Hill, Alexander L. Brown, and Kelly D. Martin (2023), "Beyond Income: Dynamic Consumer Financial Vulnerability," *Journal of Marketing*, 87 (5), 657-78.
- Santuzzi, Alecia M., Robert T. Keating, Jesus J. Martinez, Lisa M. Finkelstein, Deborah E. Rupp, and Nicole Strah (2019), "Identity Management Strategies for Workers with Concealable Disabilities: Antecedents and Consequences," *Journal of Social Issues*, 75 (3), 847-80.
- Scope (2025), "The Disability Price Tag: The Extra Cost of Disability," <https://www.scope.org.uk/campaigns/disability-price-tag>.
- Scott, Maura L., Corinne MK Hassler, and Kelly D. Martin (2022), "Here Comes the Sun: Present and Future Impact in Marketing and Public Policy Research," *Journal of Public Policy & Marketing*, 41 (1), 1-9.
- Södergren, Jonatan, & Niklas Vallström (2023), "Disability in Influencer Marketing: A Complex Model of Disability Representation," *Journal of Marketing Management*, 39 (11-12), 1012-42.
- Sommerfield, Lori J., Eve Hill, Susan Fahey Desmond, and Matt Ater (2025), "Digital Accessibility Under Title III of the ADA: Recent Developments and Risk Mitigation Best Practices," https://www.americanbar.org/groups/business_law/resources/business-law-today/2025-august/digital-accessibility-under-title-iii-ada/.
- Sowińska, Agnieszka, and Rosa Pezoa Tudela (2023), "Living with Invisible Medical Disabilities: Experiences and Challenges of Chilean University Students Disclosed in Medical Consultations," *International Journal of Qualitative Studies on Health and Well-being*, 18 (1), 2221905.
- State of California (2026), "Website Accessibility," <https://webstandards.ca.gov/website-accessibility/>.
- Swenson, Kate (2019), "Sephora Basket System Indicates if Shoppers Want Assistance," *Finding Cooper's Voice: The Secret World of Autism* (November 6), <https://www.findingcoopersvoice.com/2019/11/06/sephora-basket-system-indicates-if-shoppers-want-assistance/>.

Author Accepted Manuscript

- Torres, Allyce C. (2025), "Comments on Creating Equity by Design," *Journal of Public Policy & Marketing*, 44 (2), 240-41.
- Treloar, Carla, Elena Cama, Kari Lancaster, Loren Brener, Timothy R. Broady, Aaron Cogle, and Darryl O'Donnell (2022), "A Universal Precautions Approach to Reducing Stigma in Health Care: Getting Beyond HIV-Specific Stigma," *Harm Reduction Journal*, 19 (1), 74.
- U.S. Department of Justice (2024), "Fact Sheet: New Rule on the Accessibility of Web Content and Mobile Apps Provided by State and Local Governments," (April 8), <https://www.ada.gov/resources/2024-03-08-web-rule/>.
- U.S. Department of Justice (2022), "Guidance on Web Accessibility and the ADA," (March 18), <https://www.ada.gov/resources/web-guidance/#fn:1>.
- U.S. Department of Justice (2012), "Americans with Disabilities Act Title III Regulations," <https://www.ada.gov/law-and-regs/regulations/title-iii-regulations/>.
- U.S. Department of Justice (n.d.), "Introduction to the Americans with Disabilities Act," <https://www.ada.gov/topics/intro-to-ada/>.
- U.S. Department of Labor (2025), "Disability Employment Statistics," <https://www.dol.gov/agencies/odep/research-evaluation/statistics>.
- U.S. Department of Transportation (2025), "Airline Passengers with Disabilities Bill of Rights," <https://www.transportation.gov/airconsumer/disabilitybillofrights>.
- Valero Sanchez, Marco Miguel (2024), "Decisions, Practices, and Experiences of Disclosure by Academics with Invisible Disabilities at German Universities," *Disability & Society*, 39 (12), 3261-82.
- van der Sluis, Helen, Adriana Samper, Kirk Kristofferson, and Terri Hlava (2025), "How Do Physical Disability Cues Influence Assumptions about Consumer Tastes? Unpacking the Disability Preference Stereotype," *Journal of Consumer Research*, 51 (5), 916-36.
- Vice, Jason, Beth A. Barstow, Sean Bowman, Tapan Mehta, and Sangeetha Padalabalanarayanan (2020), "Effectiveness of the International Symbol of Access and inclusivity of other disability groups," *Disability and Health Journal*, 13 (1), 100836.
- World Health Organization (2023), "Disability," <https://www.who.int/news-room/fact-sheets/detail/disability-and-health>.
- World Institute on Disability (n.d.), "Accessibility Services and Policy Initiatives," <https://wid.org/accessibility-services/>.
- Ysasi, Noel A., Alicia B. Becton, and Roy K. Chen (2018), "Stigmatizing Effects of Visible Versus Invisible Disabilities," *Journal of Disability Studies*, 4 (1), 22-9.

Author Accepted Manuscript

Yu, Tiffany (2024), *The Anti-Ableist Manifesto: Smashing Stereotypes, Forging Change, and Building a Disability-Inclusive Word*. Legacy Lit.

Zeng, Fue, Qing Ye, Jing Li, and Zhilin Yang (2021), “Does Self-Disclosure Matter? A Dynamic Two-Stage Perspective for the Personalization-Privacy Paradox,” *Journal of Business Research*, 124, 667-75.

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Web Appendices

The Perfect Storm: The Marketplace Conduction Model of Consumer Vulnerability (MCM-CV)

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These materials have been supplied by the authors to aid in the understanding of their paper. The AMA is sharing these materials at the request of the authors.

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Web Appendix A: Definition of Non-Apparent Disability and Non-Exhaustive List of Non-Apparent Disabilities

Definition of Non-Apparent Disability

A non-apparent disability, also known as an invisible or hidden disability, is classified as a physical, mental, or neurological condition that is not visible from the outside, yet can limit or challenge a person’s movements, senses, or activities to carry out normal day-to-day life activities (Disabled World 2025).

Table W1: Non-Exhaustive List of Non-Apparent Disabilities

ADHD	Crohn’s disease	Inflammatory bowel disease	Reflex sympathetic dystrophy
Anosmia	Depression	Intracranial hypertension	Repetitive stress injuries
Anxiety disorders	Developmental language disorder	Interstitial cystitis	Rheumatoid arthritis
Arachnoiditis	Diabetes	Irritable bowel syndrome	Schnitzler’s syndrome
Asperger syndrome	Dysautonomia	Lactose intolerance	Schizophrenia
Autism	Ehlers-Danlos syndrome	Lupus	Scleroderma
Bipolar disorder	Endometriosis	Lyme disease	Sjögren’s syndrome
Brain injuries	Epilepsy	Major depression	Spinal disorders
Cancer	Fetal Alcohol Spectrum Disorder	Metabolic syndrome	Temporomandibular joint disorder
Charcot-Marie Tooth Disease	Fibromyalgia	Migraines	Transverse myelitis
Chiari malformation	Food allergies	Misophonia and sensory processing disorder	Trigeminal neuralgia
Chronic Fatigue Syndrome	Fructose malabsorption	Multiple sclerosis	Ulcerative colitis
Chronic pain	Hereditary fructose intolerance	Narcolepsy	(Disabled World 2025)
Circadian rhythm sleep disorders	Hyperhidrosis	Personality disorders	
Coeliac disease	Hypoglycemia	Psychiatric disabilities	

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Web Appendix B: Propositions to Derive Testable Hypotheses

Proposition 1. Across experience pathways, strengths-based consumer coping orientations are more likely to result in adaptive participation strategies, self-advocacy, and sustained marketplace engagement despite accessibility barriers, whereas deficit-based coping orientations are more likely to result in withdrawal, avoidance of disclosure, and reduced future participation.

Proposition 2. When disclosure occurs, strengths-based marketplace actor orientations are more likely to translate disclosure into inclusive, autonomy-supportive accommodations, whereas deficit-based orientations are more likely to produce minimal, compliance-driven responses that fail to support experiential inclusion.

Proposition 3. Disclosure timing conditions marketplace actor awareness and accommodation feasibility, thereby shaping the likelihood that accessibility barriers are mitigated or amplified within marketplace interactions.

Proposition 4. Cross-level misalignment between consumer coping orientations and marketplace actor accessibility approaches increases the likelihood that disclosure events produce marketplace shocks and reinforce vulnerability trajectories across future interactions.

Proposition 5. Alignment between strengths-based consumer coping orientations and strengths-based marketplace actor accessibility approaches is more likely to disrupt vulnerability feedback loops by promoting trust, inclusion, and sustained marketplace participation.

Proposition 6. Repeated marketplace interactions shape future consumer coping orientations through cumulative learning processes, such that exposure to inclusive, strengths-based responses increases adaptive engagement, whereas repeated exposure to deficit-based responses increases the likelihood of withdrawal and reduced disclosure.

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Proposition 7. Marketplace systems structured around proactive accessibility and universal design principles are less likely to rely on disclosure as a trigger for accommodation and are therefore more likely to mitigate vulnerability across experience pathways than systems dependent primarily on disclosure-initiated responses.

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References

Disabled World (2025), “Invisible Disabilities: List and General Information,” (accessed May 29, 2025), www.disabledworld.com/disability/types/invisible-2/.

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