ACCESSIBILITY LITERACY IN TOURISM: ASSESSING WORKFORCE KNOWLEDGE GAPS THROUGH THE 'CRETE FOR ALL' INITIATIVE

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1. Introduction

Accessibility and inclusive tourism have become increasingly important within discussions on sustainable destination development and tourism competitiveness and are reshaping tourism destinations globally (Achillas et al., 2024). Contemporary approaches to accessibility extend beyond physical infrastructure and emphasize the creation of services and communication practices that enable equal participation for all individuals, including people with visible and invisible disabilities, neurodivergent individuals, older adults, families, and individuals with temporary or situational accessibility needs (Karakanta, 2025). At the same time, island destinations such as Crete, whose economies are strongly dependent on tourism, increasingly depend on tourism workforces equipped with accessibility knowledge and inclusive attitudes, alongside accessible infrastructure improvements (Kamyabi & Alipour, 2022).

Despite growing international attention to accessible tourism (Qiao et al., 2022), accessibility in practice is still frequently approached in narrow and fragmented ways, primarily associated with mobility-related infrastructure. Research suggests that tourism professionals often receive little or no training regarding invisible disabilities, neurodiversity, sensory accessibility, inclusive communication, and reasonable adjustments in service provision (Jepson et al., 2024). Consequently, misconceptions and insufficient awareness may persist even among frontline tourism workers.

Previous research has also highlighted the broader attitudinal context within which accessibility training initiatives are needed. A large cross-sectional study conducted in Greece, including participants from Crete, found particularly low levels of positive attitudes towards people with physical disabilities, among the lowest reported internationally in comparable studies (Kritsotakis et al., 2017). Similar concerns were identified regarding attitudes towards people with intellectual disabilities, particularly in relation to exclusion, overprotection (sheltering), perceived similarity, and empowerment. The study further indicated that higher levels of self-reported disability-related knowledge, together with educational exposure, were

associated with more positive attitudes, underlining the need for systematic disability and accessibility education within professional training environments.

In response to these challenges, the 'Crete for All' initiative was developed as a targeted five-hour face-to-face interactive educational intervention designed to strengthen accessibility-related knowledge, attitudes, and practical competencies within Crete's tourism ecosystem. The programme is implemented across all regional units of Crete during the period 2026–2027 through the support of the Region of Crete, in collaboration with the Tourism and Entrepreneurship Laboratory of the Department of Business Administration and Tourism at the Hellenic Mediterranean University.

The initiative is grounded in the assumption that accessible tourism cannot be achieved through isolated infrastructure interventions alone, but requires a shared language and broader accessibility knowledge and awareness across the entire tourism ecosystem. This conceptualisation aligns with ISO 21902:2021, which defines accessible tourism as a systemic approach encompassing the full continuum of tourism services, including transportation, accommodation, attractions, food and beverage services, information and communication, and ancillary services, while also emphasizing the importance of coordinated human competencies alongside physical accessibility provisions (International Organization for Standardization, 2021). For this reason, the intervention targets not only frontline tourism employees, but also professionals involved in tourism planning, management, communication, and service design.

2. Theoretical Framework

The study is grounded in the social model of disability, which understands disability as the outcome of the interaction between individuals and socially produced barriers, including physical, organizational, informational, communicative, and attitudinal barriers (WHO, 2022; Burhan et al., 2026). Within tourism, this perspective shifts attention toward what the literature describes as the accessibility chain, including information provision, digital content, booking procedures, transportation, staff interaction, sensory environments, service flexibility and feedback (Qiao et al., 2022). From this perspective, attitudinal and informational barriers may be as restrictive as physical ones, while tourism professionals' ability to recognise and respond to diverse visitor needs, conceptualised here as *accessibility literacy*, becomes an important dimension of service quality.

These considerations may be particularly relevant in island tourism destinations such as Crete, where operational and contextual challenges may hinder efforts to improve accessibility across the tourism service chain. Understanding existing knowledge gaps among tourism professionals is therefore an essential first step toward the development of effective training interventions and more inclusive tourism policies. Against this background, the study aims to explore baseline levels of accessibility literacy among tourism professionals in Crete prior to participation in the educational intervention and to examine their associations with key demographic and occupational characteristics.

3. Methodology

The study employed a quantitative baseline assessment design as part of the 'Crete for All' educational intervention. Data were collected through anonymous self-administered questionnaires completed prior to each of the first 10 training seminars conducted between late February and early May 2026, using a census-based approach whereby all attendees were invited to participate. Participants were recruited through an extensive open public call for seminar attendance. The present analysis includes all attendees who provided complete data (n = 202).

The sample consisted primarily of women (62.4%), with hospitality and accommodation services representing the largest occupational group. Participants represented a broad age range, with the largest age

group being 40–44 years (15.6%). Approximately three quarters reported university-level or postgraduate education, while just over half were employed in very small or small enterprises.

The questionnaire collected a broad range of sociodemographic and occupational variables, and also included questions relevant to accessibility literacy and tourism service provision, alongside 15 items assessing accessibility literacy. This accessibility literacy scale was constructed by the research team based on contemporary literature on accessible tourism and disability inclusion. The initial item pool subsequently underwent expert review for conceptual relevance and clarity, following which selected items were retained for the final scale. The instrument assessed common misconceptions and levels of understanding regarding disability, accessibility, inclusive tourism services, invisible disabilities, sensory accessibility, reasonable adjustments, accessibility chains, and inclusive communication practices.

Example items included statements such as: “There are no levels of accessibility. A place is either accessible or inaccessible”, “Most businesses with accessible infrastructure do not adequately promote it”, and “Compliance with Inclusive marketing principles is achieved primarily by providing accessible online informational content”. Each item included three response options (“True”, “False”, and “I do not know”). For scoring purposes, items were coded dichotomously, with correct responses scored as 1 and incorrect or “I do not know” responses scored as 0. Total scores ranged from 0 to 15, with higher scores indicating greater accessibility literacy.

In addition to the objective accessibility literacy scale, participants self-rated their disability-related knowledge on a 10-point scale. This variable was analysed separately from objective accessibility literacy. Participants also reported their sources of disability-related knowledge (nine predefined categories) and the frequency of their direct contact with individuals with mobility disabilities in everyday life.

All statistical analyses were performed using IBM SPSS Statistics v.31. Descriptive statistics and reliability analyses were conducted for the study instrument. Associations between accessibility literacy scores and participant and occupationaln characteristics were examined using correlation analyses; variables demonstrating statistically significant bivariate associations were subsequently entered into a multivariable linear regression model to identify independent predictors while adjusting for potential confounding variables. The accessibility literacy scale demonstrated acceptable internal consistency (Cronbach’s $\alpha > .70$; McDonald’s $\omega > .70$).

Ethical approval for the study was obtained from the Research Ethics Committee of the Hellenic Mediterranean University.

4. Findings

The mean total accessibility literacy score was 8.90 out of 15 (SD = 2.95), corresponding to an average correct response rate of 59.3%, reflecting moderate overall levels of accessibility literacy alongside substantial knowledge gaps across the sample.

At the item level, the highest correct response rates were observed for the statement indicating that individuals without visible signs of disability may still require assistance (86.1%), followed by the recognition that wheelchair accessibility does not automatically guarantee accessibility for all (78.7%), and that providing complete accessibility information, including limitations, is preferable to withholding such information (77.7%). In contrast, the lowest correct response rates were recorded for the statement that compliance with inclusive marketing principles extends beyond the provision of accessible online content (17.3%), that reasonable adjustments encompass a broader range of modifications beyond physical adaptations such as ramps (21.3%), and that sensory overload cannot be prevented through willpower alone (22.3%). The accessibility chain concept also proved challenging, with only 41.1% of participants correctly identifying that a single point of failure may render the entire accessibility journey ineffective.

The multivariable linear regression model identified educational level and number of disability-related knowledge sources as significant independent predictors of accessibility literacy, together explaining 19.4% of the variance in total scores. No significant associations were observed between accessibility literacy and the remaining socio-demographic or occupational characteristics examined. Notably, frequency of personal contact with individuals with mobility disabilities was significantly associated with self-reported disability-related knowledge but not with objective accessibility literacy scores.

5. Discussion and Implications

The findings indicate that important accessibility-related knowledge gaps persist even among tourism professionals who voluntarily enrolled in an accessibility-focused training initiative. Participants demonstrated stronger knowledge of infrastructure-related accessibility issues, while understanding of invisible disabilities, sensory accessibility, neurodiversity, reasonable adjustments, inclusive marketing, and the broader accessibility chain was considerably lower. These results suggest that accessibility in tourism continues to be viewed primarily through a physical infrastructure lens rather than as a multidimensional service and organisational issue requiring broader accessibility literacy (Lu et al., 2025; López-del-Pino et al., 2026).

Particularly concerning was the very low recognition of sensory overload as a condition that cannot be overcome through willpower alone. This finding suggests that neurodiversity and sensory accessibility remain poorly understood within tourism service contexts and may still be interpreted through individualistic or behavioural assumptions rather than through an accessibility and environmental accommodation perspective. Given that sensory overload is closely associated with environmental stimuli and sensory processing differences among many neurodivergent individuals (Strömberg et al., 2022), these findings reveal the persistence of individualistic interpretations of sensory distress, potentially limiting the recognition of environmental responsibility within inclusive tourism settings (Finnigan, 2024).

Accessibility literacy was more strongly associated with educational attainment and the diversity of disability-related knowledge sources than with direct contact with individuals with mobility disabilities. This finding has direct implications for workforce development, suggesting that personal contact experience does not automatically translate into greater accessibility literacy or more inclusive service practices. Instead, the findings underscore the importance of structured and targeted educational interventions capable of developing broader accessibility awareness and practical service competencies.

Several limitations should be considered when interpreting these findings. Voluntary participation introduces the possibility of self-selection bias, as individuals who enrolled may already have been more aware of, or positively oriented toward accessibility issues than the broader tourism workforce. At the same time, this may also imply that accessibility-related knowledge gaps within the wider tourism sector are considerably larger than those observed in the present sample. Additionally, the study relied on a researcher-developed instrument which, despite demonstrating acceptable internal consistency, requires further psychometric validation in larger and more diverse populations.

Notwithstanding these limitations, the baseline findings of the ‘Crete for All’ initiative offer a substantive empirical profile of accessibility literacy within Crete’s tourism workforce, identifying both the specific knowledge domains in which gaps are most pronounced and the participant characteristics associated with stronger literacy levels. These findings can also inform the development of targeted accessibility education programmes of broader scope and longer duration within tourism settings.

Keywords: accessibility knowledge, accessibility literacy, accessible tourism, disability, invisible disabilities, neurodiversity

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