

Developing Video Vignettes for Tourism Research: Protocol and Quality Indicators

ABSTRACT

Video vignettes are information-rich stimuli using audio and visual presentations to elicit viewer responses. Though rarely used in tourism research, messages delivered via video vignettes are arguably more engaging and realistic than written vignettes. This paper aims to develop clear guidelines for producing video vignettes and evaluating such efforts. A rigorous four-step procedure for producing authentic and valid video vignettes is created and implemented. The examined context involves an exploration of stereotypes shared by Hong Kong residents of Mainland Chinese tourists. A total of 10 video vignettes are developed and used as stimuli in 26 semi-structured interviews. Qualitative and quantitative appraisals are conducted to create and test the protocol and quality indicators. Recommendations are made based on the lessons learned from the validation process. The path toward the creation of video vignettes can provide directions for other tourism research inquiries, such as tourist interactions, embodied experiences, and mutual gaze.

Keywords: Video Vignettes, Visual Methodology, Embodied Cognition, Video-based Interviews, Quality Indicators, Stereotypes

1. INTRODUCTION

Although social scientists recognized a “pictorial/visual turn” in multiple disciplines, such as sociology and anthropology, tourism research efforts employing visual methods for data collection and analysis remain limited (Rakić and Chambers 2012). The use of internally produced videos as research tools is even rarer in tourism, though videos demonstrate potential in many situations wherein traditional methods encounter difficulties, such as in investigating embodied movements and experiences, fleeting encounters, precognitive triggers, practical skills/performances, affective interactions, and various uncontrolled and shifting environments (Bates 2015; Griffin 2019). Videos are viewed as a formidable choice for examining embodied cognition (Gylfe 2017), which states that people’s thoughts, feelings, and behaviors are grounded in sensory experiences and bodily states (Meier et al. 2012). From this perspective, human encounters are defined as “tentative events in the sense that they emerge through the movement of bodies in relation to other bodies and materialities, an understanding of which requires engagement with the flow and spaces of that fluid ‘becoming’” (Äijälä 2021, 4). Specifically, people can modify their behaviors within their social and cultural relations according to changing circumstances, thereby benefitting or suffering as a result of choosing between alternatives. People can also develop relations by embodying skills and connecting movements to perceptions. Briefly, interpersonal interaction is relying on a process of sensing each other through movement and emotions.

Despite the growing number of studies acknowledging the importance of tourist interactions in understanding tourist experiences and/or resident support for tourism development (Uriely, Maoz, and Reichel 2008), methodological endeavors to effectively examine fluid touristic encounters remain in their infancy. Traditional tourist encounter/interaction studies relied solely on self-report methods (e.g., Styliadis 2020), and thus struggled to appreciate the moving nature of encounters occurring in spaces and through

events, gestures, and vocal expressions, which implies intricate forms of engagement (Pearce 2010). Embodied and unpredictable forms of engagement imply that moving-image methodologies offer opportunities to embrace situated, embodied, and moving encounters. Unlike still photography, which runs the risk of flattening actions and experiences, videos can integrate multiple dimensions of existence (e.g., pictorial, kinetic, textural, rhythmic, and tonal) and direct viewers' attention to the material embeddedness and situatedness of audiovisual practices (Vannini 2015). Therefore, video vignettes provide researchers with multimodal platforms for exploring/assessing the embodied and nonrepresentational spaces of touristic encounters, as well as complex and fluid interactions. Additionally, embodiment research views researchers and participants as heterogeneous, situated, embodied, and emergent entities, whose abilities to express and share understandings and experiences are co-shaped by materials that facilitate this process (Kullman 2015). Video vignettes provide participants with not only additional modes of attention other than visual, including listening, sensing, and feeling (Bates 2015), but also opportunities to show their observational prowess. However, the tourism research community adopted this tool only to a limited extent, with most scenarios presented through text (Lee and Scott 2017). In the wide social science research world that utilizes video vignettes, scant discussions exist on the development, application, and analytic processes of such tools (Schoenberg and Ravdal 2000). Therefore, the first objective of this study is to develop a reliable and meticulous protocol for producing high-quality and effective scripted video vignettes for tourism research. This paper will document the procedure leading to the full implementation of video vignette-induced interviews.

Although rigorous research procedures can ensure internal validity, the broader external ecological validity of studies using video vignettes is often questioned. The most cited criticism against the vignette methodology is the gap between vignettes and social

realities, that is, vignettes cannot fully reflect complex realities, and responses to vignettes should not be taken as actual reactions to realistic situations (Wilks 2004). To test and improve the validity of video vignettes, previous empirical studies developed or adopted a series of indicators, such as perceived realism (e.g., Hillen, van Vliet, de Haes, and Smets 2013), attentional focus and engagement (e.g., Visser et al. 2016), and credibility and manipulation checks (e.g., Grandey, Fisk, Mattila, Jansen, and Sideman 2005). However, a consensus is yet reached on quality indicators for video vignettes, especially within a qualitative research paradigm (Rakić and Chambers 2012). Thus, the second objective of this study is to develop and test multiple quality indicators of video vignettes for tourism research through an exemplar study. This work is directed towards providing illustrations of the video-vignette development and quality evaluation process as well as attendant suggestions for tourism researchers. Thus, research findings of the exemplar study will not be reported in detail.

2. LITERATURE REVIEW

2.1 Visual Methodology

Visual research methods are social science data collection and participant collaboration techniques that prioritize the generation, use, and analysis of visual materials (Annear et al. 2014). Visual methodology is grounded in the belief that “valid scientific insight in society can be acquired by observing, analyzing, and theorizing its visual manifestations: behaviors of people and material products of culture” (Pauwels 2010, 546). The observation of naturally occurring and spontaneous behaviors has attracted increasing interest of social scientists owing to the significant progress in behavioral science and technological advancements. For example, Pearce and Wang (2019) examined tourist posing in photographs by employing human ethological concepts and methods. Tourists’ micro behaviors, facial expressions, gestures, and postures were found to convey not only biological and evolutionary significance but also meanings endowed by culture and society. Communication research has long emphasized the role of nonverbal behaviors in interpersonal communication and social relationship establishment (Gabbott and Hogg 2001). People respond to others through explicit verbal cues and close observation of tell-tale nonverbal cues tied to the context of observed behavior. However, empirical tourism research that takes the observational prowess of respondents into account remains scant.

Viewing research subjects as proto-human ethologists garnered solid theoretical support, that is, the influential two-system framework in cognitive and social psychology (Evans 2007). System 1 intuitive processing is described as fast, reflexive, automatic/heuristic, associative, affective, slow learning, and difficult to control (e.g., affect heuristic). System 2 reasoning processes are described as slow, reflective, deliberately controlled, rule governed, emotionally neutral, fast learning, and relatively flexible. Recent embodied cognition research suggested adding the human sensory-motor system into the

framework as a “half system”, because of its fundamental role in both intuitive and reflective processing (Petracca 2020). Cognition is no longer viewed as disembodied symbol processing, but beginning with inputs from the sensory system and ending with commands to the motor system (Shapiro 2019). Briefly, cognition arises from the continuous interaction of the body, brain, and world. Reflective judgement has been studied extensively, but research on intuitive judgement and embodiment burgeoned only in the past two decades (Akinci and Sadler-Smith 2012; Wiltshire et al. 2015). Automatic intuitive processing is often activated in visual or social perception and aided by nonverbal cues to quickly structure information in the environment and form reasonable interpretations (Glöckner and Witteman 2010). Visual methods offer rare opportunities to incorporate minimalist signals (e.g., hand and voice signals) into the cognitive process. Particularly, videos enable the capturing and sharing of continuous, sometimes implicit, live behavioral processes and the situations in which such behaviors occur. Thus, video-based methodologies fit well with studies that explore complex interpersonal interactions, embodied movements and experiences, or the influence of environments on behaviors.

Although video-based methods are not suitable for all research questions considering the associated costs and challenges in data collection and analysis (e.g., ethical and technical issues), they can offer unique insights into the complex or sensitive problems that challenge traditional survey and interview methods. Advantages of video-based methods have been extensively discussed, such as generation of rich data (e.g., verbal, vocal, and bodily conducts in social interactions) inaccessible by other methods, vivification of abstract concepts, facilitation of participant recall, and compatibility with traditional research techniques (Bates 2015; Pauwels 2010). However, most tourism studies using visual stimuli are based on images or photographs, thereby limiting presentations and analyses to static cross-sectional scenes or behaviors (Park and Kim 2018; Rakić and Chambers 2012). To

incorporate time, space, motion, and sensory variables in tourism studies on individual behaviors, experiences, impression formation and memories, interactions, and relationships, video vignettes have advantages unmatched by static images. Nevertheless, few tourism studies have employed video-based methodologies, and even less have created scripted videos for specific research topics or contexts. Tourism research typically employs externally produced videos from secondary sources (Pearce and Wang 2019), such as promotional videos or private recordings on social media (Stepchenkova, Su, and Shichkova 2018). Some tourism ethnographic studies produced videos recording natural events or personal experience of the researcher or other participants (e.g., Äijälä 2021). However, video ethnographies restrict the wide application of video methods owing to sample size limitations and ethical issues.

Chambers (2012) found that visual methods are typically employed with little theoretical or methodological contextualization because visual tools are often not central to the research, thus advocated the establishment of a rigorous research process to ensure the legitimacy of visual research. Morse (2015) further suggested a series of verification strategies, including prolonged engagement, thick description, triangulation, and peer review, to facilitate researchers' continual checking and adjustment of research processes. However, scant discussions exist on the development and verification of visual tools in tourism research, let alone the development of scripted videos. Therefore, this study aims to explore the creation and evaluation of video vignettes as stimuli to solicit respondents' views.

2.2 Vignette Methodology

Vignettes are short carefully constructed stories designed to simulate key features of real-world situations, to which research participants are invited to respond by either answering set questions or providing a narrative about the scenarios (Schoenberg and Ravdal 2000). The vignette method is particularly useful in examining potentially difficult topics of

inquiry, such as mental health, domestic violence, and hostility toward out-groups (e.g., Johnson 2000; Lee and Scott 2017), because it allows situational contexts to be explored and influential variables to be elucidated. Participants can respond as an external observer, thereby desensitizing the subject matter (Liyanapathirana et al. 2016; Hughes and Huby 2002). More importantly, the vignette method can improve the quality of collected data by reducing the influence of socially desirable responses (Eifler 2007), and is particularly suitable for abstract issues requiring contextualization, such as cultural norms and value orientations (Torres 2009). However, research design manuals from the heyday (1930s ~1960s) of the development of social science methods did not consider vignettes (Oppenheim 1966). This is mainly because of pragmatic issues in constructing and presenting complex materials as well as concerns about how to analyze situations wherein multiple factors are varied as independent variables (Sleed et al. 2002). Advancements in technology and statistical tools paved the way for the development of vignette-based methods.

Vignettes are generally used to support traditional data collection techniques, such as surveys and interviews, to provide additional insights that traditional methods alone may not be able to obtain (Hughes 1998). Most empirical studies employed vignettes within a quantitative paradigm, generally as part of an experimental design or survey (Barter and Renold 2000; Marder, Erz, Angell and Plangger 2019). The use of vignettes gives experiment designs an advantage over simple experimental manipulations, that is, multiple subtle changes in conditions, rather than the alteration of only one or two variables at a time, can be presented. However, in empirical studies, participants are often presented with several standardized scenarios and asked to answer questions using predetermined categories. Thus, the use of vignettes in a positivist paradigm sacrifices peripheral nuances. By contrast, using vignettes in constructivist approaches gives respondents more space to define a situation in their own terms and encourages them to explore and capture the complex situational positions

ascribed by different actors (Barter and Renold 2000). Vignettes also facilitate the insightful understanding of complex events and behaviors (Liyanapathirana et al. 2016). Therefore, this study employs vignettes in a qualitative research framework to explore residents' stereotypes of tourists, and most importantly, use this context to demonstrate the production of stimuli and outline their potential evaluation.

The vignette method is more prevalent in hospitality research, because of its advantages in examining service encounters or ethical situations (e.g., Damitio and Schmidgall 1993). The wide application of vignettes in tourism research was observed only after 2010, despite the rising interest in visual studies (Rakić and Chambers 2012). The value of vignettes in tourism studies lies in their presentation of a holistic, integrated picture of an entity to a target audience. The vignette method has found favor in tourism studies in two main ways. First, vignettes are used to depict future states, in which a range of complex and uncertain conditions or circumstances are extended beyond those operating currently, such as new technologies, climate change, and emergencies (e.g., Enger, Sandvik, and Iversen 2015). Several variables can be manipulated simultaneously to create plausible alternatives for the future (e.g., Amorim Varum, Melo, Alvarenga, and Soeiro de Carvalho 2011). The application of future scenarios is often embraced by destination managers as a decision-making or planning tool for long-range strategy/policy development (Formica and Kothari 2008).

Second, vignettes are often constructed as an amalgam of visual- and text-based information to vividly depict choices of product alternatives confronting consumers, which is more complete than simple text only descriptions (e.g., Lyu and Lee 2015). The advantage of scenarios lies in their presentation of natural and ecologically valid options, enabling respondents to readily understand and be more likely to make the same choice as in real life (Gomm 2004). Effective scenario designs can capture key factors likely to co-vary with the

entity under investigation. Furthermore, an anchoring vignette is occasionally adopted in surveys to detect and correct perception bias, thereby creating thresholds for comparing findings across peoples or cultures and improving validity (Araña and León 2013). However, tourism studies rarely employed vignettes in qualitative paradigm, even less in a video format. A rare example is Lee and Scott (2017) who created written vignettes in a qualitative study to lead discussion on racism in tourism settings and alleviate potential disadvantages from racial mismatch between the researchers and respondents.

2.3 Video Vignette Design

Vignettes can be presented in various forms, including text, pictures, audio, and videos (Sleed et al. 2002). Written narratives are the most common vignette technique used across disciplines (Finch 1987). Other less common forms include literature, news stories, documentaries, film, art, and photography. With the advancement of technology, social scientists have increasingly adopted video vignettes over written ones, as they can heighten realism (e.g., Aguinis and Bradley 2014). Three potentially important advantages can be observed when comparing video vignettes with text-only designs. First, videos make every single aspect of behaviors visible and contain richer contextual information and/or motivating materials for viewers to assess (Sleed et al. 2002). Text-based vignettes cannot fully represent the details of naturally occurring events or episodes of behaviors in the same way as videos (Dawtry et al. 2020). For example, accurate and sequential facial expressions and body movements can only be conveyed visually. Second, this richer audiovisual means of presentation can make events or multisensory experiences more realistic, thereby enhancing viewers' sense of involvement and eliciting responses more representative of the real world (Rakić and Chambers 2012). Third, respondents are given the freedom to choose their points of attention rather than being limited to the aspects deemed important by the researchers. This

allows researchers to observe and explore individual differences in the process of information receiving, processing, and responding (Sleed et al. 2002).

Despite such advantages, empirical studies employing video vignettes remained clustered in limited areas, such as clinical and health psychology studies, especially in patient communication (e.g., Hillen et al. 2013). Educational research favors live recordings of classroom settings when assessing teaching competence and student behaviors (Piwovar, Barth, Ophardt, and Thiel 2018). Additionally, video vignettes are often embedded in experimental research in various disciplines, including marketing and management (e.g., Tombs and McColl-Kennedy 2013) and consumer behavior (e.g., Sparks and McColl-Kennedy 2001). The use of video vignettes in qualitative research only recently became popular among health science and social work researchers, with the primary aim of obtaining insights into “the social components of participants’ interpretative framework and perceptual process” (Jenkins et al. 2010, p.178).

This study fills a gap in the tourism literature by utilizing self-developed video vignettes to induce in-depth interviews to explore residents’ socially acquired stereotypes of tourists. According to Jenkins et al. (2010), such use of video vignettes raises important ontological and epistemological questions that must be seriously addressed. Specifically, are respondents providing answers to a recording they believe to be real, and how does this incident fit into their knowledge base? Considering these challenges is part of the construction and evaluation process in this study. Few methodological papers examining the use of vignettes in social research and their application in a qualitative paradigm exist (Barter and Renold 2000). A search of the methodological literature on developing video vignettes in tourism did not identify any studies focusing on the vignette development process. The current paper is thus making a first attempt to create a “manual” for developing scripted video vignettes that meet the requirements of internal and external validity.

Although stage-based vignette design models exist, such as Hillen et al. (2013), Stacey et al. (2014), Liyanapathirana et al. (2016), and Piwowar et al. (2018), such approaches are highly suited for experimental and quantitative assessments. None of these models are adequate for guiding the systematic process of producing video vignettes with internal and external validity for use in a qualitative paradigm. Existing studies also failed to develop a comprehensive and well-justified list of quality indicators and evaluation criteria for produced video vignettes. Additionally, a consensus has yet to be reached on the interpretation and evaluation of the reliability and validity of video vignettes. Researchers choose only the indicators they believe to be adequate for examining video quality, such as perceived realism/credibility, engagement, and manipulation checks. Therefore, this study aims to establish a systematic process for creating effective video vignettes that can be used in exploratory qualitative research and develop a comprehensive list of video quality indicators.

3. METHODOLOGY

3.1 Exemplar Study

The topic of tourist stereotypes provides a suitable and realistic context for the production and evaluation of video vignettes for the following three reasons. First, stereotypes, as mental representations developed from social interactions and shared within social groups (Stangor and Lange 1994), are subjective, relative, and malleable. These features determine that constructivism may be the most appropriate research paradigm, which contains hermeneutic and dialectic elements that aid in the reconstruction of researchers' and research participants' multiple subjective realities and creation of valid knowledge constructions through consensus (Lincoln, Lynham, and Guba 2018). Qualitative visual research, which shares the same philosophical position (i.e., constructivism, with its relativistic ontology and subjectivist epistemology; Rakić 2012), may be the most practicable approach for exploring tourist stereotypes held by residents. Visuals are generally seen as representations of the reality perceived and recorded by the creator(s) in a particular context of time and space, to be subsequently interpreted differently by viewers using their own subjective knowledge. Therefore, visuals-induced interviews can promote subjective interactions between the researcher and researched while minimizing researcher bias to produce co-created knowledge, which is especially important in research involving sensitive topics, such as stereotypes.

Second, stereotyping tourists is common among destination stakeholders, but stereotypes research, which requires participants to acknowledge their potentially biased perceptions, is difficult and may produce marked social desirability responses. Hence, a credible and richly evocative technique is needed to help elicit views. The vignette methodology is the most appropriate approach for investigating individuals' subjective belief systems or reactions (Hughes 1998).

Finally, stereotyping tourists represents a type of reflexive/intuitive and heuristic thinking (i.e., System 1) based on verbal/nonverbal cues and interactional information (Hsu and Chen 2019). Video vignettes serve as necessary triggers of respondents' preconceived stereotypes, specifically, a cued-recall task is more effective than free recall in retrieving available mental content stored in long-term memory (David et al. 2018). Video vignettes are preferred over static visual images because of their advantage in capturing audio, consecutive (micro) behaviors, and interaction events, thereby providing a wider range of cues. Video vignette-induced interviews can provide respondents with considerable opportunities to label and communicate behavioral details that play an important role in stereotype activation, application, and maintenance (Lyons and Kashima 2006). Additionally, video vignettes can serve as a natural treatment and an objective approach for assessing the stereotyping process and consequences. Video vignette-induced interviews allow researchers not only to observe/capture viewers' intuitive responses (consequences of System 1) but probe how they collect, weigh, and integrate information to form a stereotypical judgement (i.e., System 2) – through collecting both self-reports and psychophysiological measures from the participants (Imhoff, Woelki, Hanke, and Dotsch 2013). As Sparks and McColl-Kennedy (2001) advocated, the video-vignette method is the most appropriate when a researcher wishes to study topics related to the subjective reactions to procedures.

The exemplar study aims to explore Hong Kong (HK) residents' stereotypes of the city's dominant tourist market, namely, Mainland Chinese tourists, whose characteristics are drawing increasing attention from many international destinations owing to the rapid rise of this outbound market. HK is the first outbound destination that receives Mainland tourists on a large scale, and Mainlanders have become the dominant source market since 1993, constituting 78.3% of the total arrivals in HK in 2019 (HK Tourism Board 2020). HK residents inevitably have more frequent, even overwhelming, interactions with Mainland

Chinese tourists. Stereotyping Mainland tourists has thus become universal among local tourism stakeholders owing to the superficial and transient nature of host–tourist encounters as well as its efficiency in processing tourist information and helping hosts deal with large numbers of visitors (McKercher 2008). However, stereotyping Mainland tourists also caused misunderstandings and negative reactions among residents, which intensified conflicts between the two parties (Hao et al. 2019). Therefore, HK serves as an ideal social setting to observe how residents stereotype this dominant tourist group as well as the triggers and consequences of stereotyping.

The current study will select typical interactions between HK residents and Mainland tourists and record them as short videos, to highlight problems existing in the mutual gaze, conversation and socialization between the two parties – many of which may be caused by preconceived stereotypes (Chen, Hsu, & Li, 2018). These specially created videos can also be used as educational materials beyond this research, to communicate prosocial norms and messages to the public by demonstrating both positive and negative resident-tourist interactions. As Tse and Tung (2021) suggested, educational videos are facilitators that DMOs and policy makers should employ to leverage positive interactions between residents and tourists. These videos may also arouse tourists’ self-reflection and stimulate their engagement in social learning and pursuing transformation (Zhang, Chen, & Hsu, 2021).

3.2 Four-step Protocol for Producing Quality Video Vignettes

To develop effective video vignettes, the research team designed and implemented a four-step procedure (see Figure 1) by referring to previous studies that adopted the video-vignette method (e.g., Corbally 2005; Hughes and Huby 2004; Johnson 2000).

INSERT FIGURE 1

Step 1 – Scenario Development from Realistic Experience

To identify typical resident–tourist interactions, the first round of in-depth interviews was conducted with 20 HK permanent residents to collect personal stories about encounters with Mainland Chinese tourists. The storytelling approach was employed, because first-person stories can reflect emic interpretations of how, why, who, when, and where events unfold with what immediate or lasting consequences (Hsu, Ning, and Woodside 2009). Storytelling can also transform interviews into situated socio-interactional activities that allow participants to collaborate with interviewers in producing topical content and jointly construct identities, relationships, stances, and stories (Kasper and Prior 2015). In particular, Lyons and Kashima (2006) suggested that biases consistent with common stereotypes would emerge when individuals reproduce a story from memory and expect to have an audience.

The 20 interview participants were recruited via purposive and snowball sampling and interviewed by a HK-born Cantonese-speaking research associate. The “insider” positionality of the interviewer in terms of language ability and cultural identity not only facilitated the establishment of mutual trust between the researcher and researched, but also ensured a better representation of participants (Bakas 2017). The interviews began with the interviewer inviting the participants to recall a memorable encounter with Mainland Chinese tourists in HK and recount their conspicuous behaviors. During the narration, the interviewer occasionally used narrative devices such as the phrase “how did you feel/react at that moment?” or “then what happened?” to encourage the storytellers to recall as many details as possible and prompt further story-like communication. Flexible follow-up questions were also asked to investigate the informants’ identifying cues, overall evaluation of the encountered Mainland tourists, and detailed attributions of the tourist(s)’ behaviors in the particular setting. The average duration of the interviews was 30 minutes. All the interviews

were audio recorded, with the participants' consent, then transcribed verbatim in standard written Chinese by a transcriber fluent in Cantonese and Mandarin.

Two researchers with different backgrounds conducted content analysis on all the collected stories, following a deductive approach with a structured matrix derived from narratology (Elo and Kyngäs 2008). To facilitate the vignette script creation, the categorization matrix contained three major elements of narration (Herman 2009), namely, **temporal and spatial environments** (location and physical environments), **characters** (i.e., tourists or locals, with detailed identities as well as all available observable features, such as gender, age, appearance, dressing, manner, speech, and behaviors), and **events** (with causes, processes, and consequences, including interactants' emotional and behavioral reactions and narrators' comments as a bystander or an involved party). To improve the trustworthiness of the findings, the two analysts coded the transcripts separately. Owing to the prior agreement on the categorization matrix, little difference was observed between the two analysts' results. An external auditor was invited to evaluate the accuracy of the interpretation of the narratives. Thus, the trustworthiness of the narrative analysis was established through investigator and theoretical triangulations (Decrop 1999).

The 20 informants provided 57 stories based on personal experiences. Of which, 72% were negative (e.g., jumping queues and children urinating or defecating in public), 19% were neutral (e.g., purchasing daily necessities in bulk or squatting on the street), and only 9% were positive (e.g., giving seats to the elderly on public transport). Scenarios representing typical interactions between HK residents and Mainland tourists were extracted from these personal stories and classified according to the setting where they occurred. For instance, the most common tourist–host encounters were those between tourists and ordinary residents (typically as passersby), followed by those between tourists and service personnel (e.g., flight attendants, hotel staff, and shop assistants). The top five settings were the airport and travel

on airplanes, shops and streets (including plazas/recreation parks), trains and train stations, amusement parks, and hotels. Each setting included positive, neutral, and negative events/actions. For example, giving seats to others, leaning on handrails, and scrambling for seats were reserved for the public transport setting. The extracted scenarios were further analyzed and reorganized according to the frequency of representative encounters and nature of the events/tourist behaviors. Next, the events in each subcategory were closely examined, compared, and reorganized. Similar events were merged, and sequential events/behaviors were linked and integrated. Thus, 11 independent scenarios were constructed, and a storehouse of rich details was established for the script development. According to Liyanapathirana et al. (2016), compared with fictional constructions, scenarios adopted from actual personal experiences offer a higher level of realism owing to their plausibility and internal validity.

Step 2 – Script Creation, Modification, and Validation

Corbally (2005) stated that a well-developed script serves as the blueprint to guide all subsequent phases of the video production and assists in achieving a quality final product. The script quality determines the internal validity of video vignettes, because their credibility can be achieved if the perceived realism is high (e.g., Hillen et al. 2013). Following Escalas' (2004) suggestion, a storyboard was created for each scenario to present a series of scenes. Storyboards serve as the key programmatic documents used by the entire production team as the base for connecting storylines as well as designing character dialogues and actions.

Following the basic scriptwriting procedure (Drennan, Baranovsky, and Baranovsky 2018), the research team determined the location and thematic events/central conflicts for each setting, wrote a logline to demonstrate the main story, created the protagonists and oppositional antagonists, and designed a clear beginning, middle, climax, and ending for each script. The events and characters' actions contained in the 11 preliminary scenarios were

creatively reassembled through the structuring device of plotting (Kukkonen 2014) to highlight the conflicts driving the plot. The interactants' dialogues, facial expressions, gestures/actions, and implications were designed using the material storehouse constructed in Step 1 and the researchers' creativity and explicitly presented in the written scripts for video recording. The seriousness of the events/behaviors and resulting consequences were designed differently across the scenarios, from smoking in a nonsmoking area to a fierce conflict on a train. Elements of ambiguity (e.g., a child running in an empty corridor and a whispered conversation between a mother and son) were also inserted in the scripts to test participants' sense of objectivity. The vague scenarios were intentional, as viewers may reveal some of their hidden views by making judgements based on limited video clues. To comprehend these scenarios, viewers have to mobilize available cognitive resources, including existing stereotypes, to make a prediction or inference. As such, neutral or ambiguous scenarios can help researchers identify participants' biases.

The storyboards created for this study required three scenes for Video 1 and two scenes for Video 6, whereas the other videos had a single scene. The level of complexity of the 11 scenarios varied. Details were necessary to ensure that the video producer had sufficient information to produce accurate video footages, but attempts were made to write concise scripts. Shorter scripts allow greater video feasibility. The 11 scripts reproduced selected real-life stories, elaborating on environmental factors and the characters' features (e.g., age, gender, appearance, words, and deeds) and interactions with locals. Essential tourist–tourist and resident–resident communications, either verbal or nonverbal, were also designed to make the plot holistic and smooth.

To improve fidelity, each script was read aloud and refined repeatedly by the researchers. The scripts were pretested by inviting three experts (two academics from Mainland China and one professional filmmaker from HK) not involved in the study to read

and comment on the credibility of the presented scenarios (Hillen et al. 2013). The experts were asked to comment on the representativeness of the scenarios and level of realism. The filmmaker was also invited to advise on the scripts' fluidity. The pretesting enhanced the scripts' reliability and validity by improving wording and logic, identifying redundant or missing details, and correcting poor manipulations (Liyanapathirana et al. 2016). After the experts endorsed the finalized scripts, a test recording was made for further feedback. The project members commented on the authenticity of the settings, characters, and content and editing of the test video, which led to further enhancements.

Step 3 – Video Production and Editing

A freelance film crew was employed to produce the videos. The crew's main tasks included recruiting actors, negotiating venues, filming, and post-production editing and polishing (e.g., adding subtitles and voice-overs). In consideration of research ethics and potential communication issues, actors were employed instead of intruding on actual tourist–host interactions. Actors perform well in not only interpreting and adhering to scripts but also repeatedly playacting slightly different versions of the same script (Hillen et al. 2013).

The main difficulties encountered by the production team before filming involved actor recruitment and venue negotiation. Very few Mainlanders were willing to depict the negative images/behaviors of Mainland tourists, because stigmatization is perceived as a fundamentally moral issue by Chinese (Yang and Kleinman 2008). Therefore, freelance HK actors with at least two years' experience in drama/film acting and the features of the characters in the scripts were employed. Moreover, the actors recruited were fluent in Mandarin. The researchers from the Mainland took charge of the casting and actor interviews. Three actors appeared in more than one video because of their superior acting skills. In the later phases of the research design, interviewers assigned the videos containing the same actor(s) to different viewers. Obstacles in obtaining suitable filming sites derived

mainly from airports and theme parks. The film director and researchers contacted airports in HK and nearby cities as well as the HK Civil Aviation Administration but were denied permission to film in an actual airplane cabin, at a boarding gate, or in restricted waiting areas. Similarly, the theme parks approached declined the requests. Despite such difficulties, suitable and credible public (street) and transport (trains) settings were identified and used.

The actors were required to follow the scripts to ensure that all the manipulations (including physical appearance, identity, and verbal and nonverbal communications) were captured in the videos. Before filming, the actors were given opportunities to rehearse the scripts on camera. They were encouraged to perform several slightly different versions by rephrasing conversations or actions based on their own experiences and understanding. Minor revisions were made to the scripts to enhance the realism of the scenarios. A research team member monitored the entire filming process to provide onsite feedback and advice. Moreover, different camera angles were trialed, as the camera angle can influence viewers' perception and strengthen vignettes' credibility (e.g., Corbally 2005). Collectively, various camera ranges and angles were used, from close-up, medium, and full to long ranges and from eye-level, oblique, low and high, as well as over-the-shoulder angles (see Appendix I). As resident stereotyping of tourists is the study focus, viewers must be able to observe both parties. Thus, cross shots and group shots were employed. Close-ups of verbal and nonverbal communication were also utilized to increase the complexity of the stimuli available to the viewers and their emotional arousal (van Vliet et al. 2013).

A salient post-filming methodological issue is how the video vignettes are introduced. A clear introduction to a video vignette can inform or remind viewers to pay closer attention to relevant settings and characters and effectively engage participants and familiarize them with the situation. Various introduction formats can be used, including a written introduction on paper or via screen or an audiovisual introduction (showing video images with a neutral

voice-over). Visser et al. (2018) suggested that an audiovisual introduction combined with camera close-ups on characters' emotional expressions could result in participants' highest level of emotional engagement. However, controlling the influence of emotion-induction on participants' subsequent perceptions is difficult. Thus, this study adopted informative subtitles to objectively introduce the locations and characters in the videos. In some scenarios, natural background sounds were intentionally used to indicate the required code of conduct in the context, such as a broadcast on rules on eating and drinking on public transportation. Some inaudible live dialogues between the actors were dubbed and synchronized after filming in a multimedia studio using a microphone and the Sound Recorder software.

A total of 11 video vignettes (each 1 to 2 minutes long) featuring different tourist characteristics (e.g., gender, age, and travel modes) and settings (i.e., streets, shops, trains, hotels, airports, and tourist sites) were produced. Experts from and outside the research team (i.e., the two faculty members who pretested the scripts) were invited to comment on all videos. Based on their feedback, minor problems were corrected by re-filming or removed by editing. A critical decision was made to exclude two videos deemed unconvincing, that is, one in a fake airport and one on a mock flight. Thus, nine videos were retained.

Step 4 – Video Validation and Application

Pilot interviews were conducted with six purposively selected HK permanent residents in October 2018 to check the credibility and validity of the nine retained video clips as well as the participants' understanding of the video scenarios. Before the videos were played, the interviewees were encouraged to freely discuss their existing impressions of Mainland tourists and evaluate their perceived fairness and confidence in understanding Mainlanders' behaviors. Each interviewee was then instructed to watch four to five video clips (including positive and negative scenarios) and answer a short questionnaire on the

video quality after watching each video. The interviewer tried to assign videos randomly on the premise that each video should receive at least three views. Finally, the six pilot interview participants provided 27 responses, and each video clip received three responses. The viewers' detailed interpretation and evaluation of the events and characters' behaviors in the videos as well as related personal experiences were probed after they completed each questionnaire.

The questionnaires included a series of attitude scales, including self-identity, confidence, perceived fairness in understanding Mainland tourists' behaviors, and credibility of the video content; and also collected data on the participants' demographics, level of engagement with the vignettes and feelings after watching the videos. The credibility check was conducted by measuring perceived realism (i.e., the extent to which the characters and situations in the video vignettes were judged to be realistic and likely to exist/occur in real life) with six items adapted from Sparks and McColl-Kennedy (2001). Viewers' engagement was assessed to test the ecological validity of the video design, as they should be able to imagine themselves in the shoes of the local HK residents in the videos. Engagement is a multidimensional construct that can be defined as the degree to which research participants view videos attentively, immerse themselves in the video vignettes' stories, identify with characters, and experience empathy and emotions (Visser et al. 2016). Nine items from the Video Engagement Scale (Visser et al. 2016) were adopted. Additionally, three to six manipulation-check questions were developed by describing the observable events and behaviors displayed in each video. Respondents were asked to rate their level of agreement with various statements to verify whether their interpretation of the scenarios is in line with the design. Seven-point Likert scales ranging from "1 = strongly disagree" to "7 = strongly agree" were used to assess all the items. Feelings after watching each video were measured

using three seven-point bipolar scales (i.e., “unpleasant–pleasant,” “negative–positive,” and “dislike–like”). The survey data were analyzed using SPSS 25.0.

The interview questions following each video vignette focused on participants’ observations and judgement of the Mainland tourists in the video as well as their evaluation of the tourist–resident encounters. Interviewees were encouraged to imagine themselves as the local(s) in the scenarios and how they would think, feel, and behave in the same situations and why. They were also asked to evaluate the scenarios by linking their own experiences with Mainland tourists and indicate changes (if any) in their impression of Mainland tourists after viewing the videos. Based on the pilot interview results, the videos were further edited, the interview guide and questionnaire for the formal interviews were refined.

Revisions to the survey mainly involved the measurement of credibility and specific emotional responses to each scenario. Three items were added to measure credibility comprehensively. The item “Being able to adopt the role of the HK character shown in the video” in the original credibility scale was separated and replaced by three items based on Cohen’s (2001) identification concept. Identification with a character represents an individual’s perception of a character being a similar person or a person with whom s/he might have a social relationship and thus feel empathy for and an affinity with the character. When viewers identify with protagonists, they are engrossed in imagining what it would be like for the characters to experience the events described in the film (Cohen 2001).

Emotional response measurements were further added to the formal interview survey to check the manipulation effect of the videos, that is, in not only delivering the messages the designers want to convey but also arousing the viewers’ corresponding reactions. The Geneva Emotion Wheel (Sacharin, Schlegel, and Scherer 2012) was adapted to detect viewers’ discrete emotions and the intensity of each emotion. The formal interview guide focused more on the video content than the video quality. A total of 26 interviews were conducted

before theoretical saturation was reached in January 2019. To eliminate the priming effect, the interviewers tried to assign the videos randomly while ensuring that every participant viewed both positive and negative scenarios. Each participant was invited to watch two to three videos, and the interview following each video lasted approximately 16 minutes on average. Ultimately, the 26 formal interview participants contributed 60 responses, and each video received 10 responses.

4. RESULTS

4.1 Profile of Respondents

The profile of the participants for the three rounds of interviews is presented in Table 1. In the pilot sample ($n = 6$), the gender breakdown was equal, but high-income, young, and highly educated HK residents who primarily identified themselves as Hong Kongers were overrepresented. The respondents were moderately confident in correctly understanding Mainland Chinese tourists' behaviors and believed that their impression of Mainland tourists was generally fair. The formal interview sample ($N = 26$) was more representative than the pilot sample in terms of gender, age, income, and self-identity but failed to adequately represent residents with education lower than the college level.

INSERT TABLE 1

4.2 Pilot Interview Results on Video Quality

The six pilot interview participants provided 27 observations. Each of the nine videos employed for the pilot interviews was played three times, receiving comments from three different viewers. The analysis results of the 27 responses are reported in the two subsequent subsections. The questionnaire and interview results are presented separately.

4.2.1 Results from Pilot Questionnaire

The Cronbach's alphas provided in Table 2 demonstrate that the internal consistency of the scales was excellent. Perceived credibility and level of engagement with the vignettes were high, indicating that the stories in the videos seemed plausible and real to the participants. The ANOVA results on video credibility (see Appendix II) showed that all the HK characters in the videos were perceived as credible. However, the perceived realism of

the Mainland tourists' appearance or behaviors and the situation in Video 3 (see Appendix III) was rated significantly lower than that in the other videos. In addition, the perceived realism and believability of scenarios 1 and 3 were rated significantly lower than those of the other scenarios. Finally, the viewers reported a much lower ability to take the role of the HK characters in Videos 1, 2, 3, and 9 than in the other videos. The means of manipulation check questions were all above 5.40, indicating the participants' satisfactory understanding of the video content. The participants' feelings about the vignettes were also consistent with the intent of the scenarios; thus, the ecological validity of the video-vignette design was achieved (Visser et al. 2016). To identify specific reasons behind the relatively low credibility or engagement scores, the interview responses were examined in detail.

INSERT TABLE 2

4.2.2 Results from Pilot Interviews

In the pilot interviews, four open-ended questions focused on video quality: 1) perceived realism/believability of the characters and events, 2) capability and clues for identifying the Mainland tourists in the videos, 3) degree of concentration while watching the videos, and 4) familiarity with the scenarios and changes in stereotypes (if any) after watching the video. As shown in Table 3, Mainland tourists in the videos were easily identified through their language, physical appearance, attitudes, and behaviors in 22 of the 27 observations (81.5%). Only five reported difficulties in distinguishing the Mainland tourists from the Taiwanese tourists or locals based merely on their physical appearance, especially for the young generation of Chinese. However, the participants claimed that they would be able to distinguish between the three groups based on their dialect, accent, or tone if the persona in the videos spoke at length or clearly.

As for the credibility of characters and scenarios, Videos 6, 8, and 9 were reported by all viewers as believable, whereas the other videos contained more or less improbable elements. For instance, two actors playing local residents in Videos 1 and 4 were considered as “nonlocals” because of hair and fashion styles or behaviors. Such comments actually reflected the HK residents’ self-stereotypes. Moreover, all the participants reported full concentration in viewing the videos assigned to them. Among the nine videos, four (i.e., Videos 2, 4, 7, and 8) were considered as portraying familiar phenomena, whereas three (i.e., Videos 1, 3, and 9) demonstrated unfamiliar phenomena based on the participants’ personal experiences. Interestingly, the scenarios perceived as unfamiliar reflected positive or ambiguous behaviors of Mainlander, whereas the familiar scenarios reflected their negative behaviors. Finally, four of the 27 views reported a slightly positive change in stereotypes and one reported a slightly negative change, while 22 (82%) reported no change, indicating that the developed video vignettes did not powerfully affect the existing stereotypes of the research subjects. In other words, the subsequent evaluations and attributions made by the respondents after watching the videos can faithfully reflect their stereotypes of Mainland tourists without being biased by the vignettes they watched. The above results cannot be obtained by methods other than video-induced interviews.

INSERT TABLE 3

To identify further editing or modification requirements, detailed comments of the pilot interviewees were analyzed. Video 1 was re-edited due to some relatively improbable events portrayed. For example, one respondent commented that:

It's not real. A man speaking Mandarin helped a local old woman who was carrying a big luggage and told her that she should not use the escalator...

How can a tourist be more familiar with railway facility than a local? ...

Moreover, his appearance is really not like a tourist...

Another respondent expressed a similar view and suggested the removal of one scene. Thus, the first scene in Video 1 was removed. This deletion also supports Finch's (1987) statement that a storyline containing excessive transformation scenes may be too confusing for participants to remember or evaluate.

Video 3 was kept intact, though all three viewers perceived it as uncommon based on their personal experiences but admitted it was still possible considering the huge number and diversity of Mainland tourists. This attribution led to a slight improvement in their prior impression of Mainland tourists after watching the video. Video 4 was re-edited by removing two passersby questioned by the viewers – either because of their unnatural performance or inauthentic appearance. The deleted clips were less than four seconds each and thus did not influence the continuity of the plot.

Video 6, which contained mixed positive and negative scenarios, was split into two vignettes, because the same characters exhibited contrasting behaviors in the continuous storyline, making it confusing for some viewers. The negative scenario was removed and made into a separate video (Video 10). Thus, the original Video 6 was changed from a mixed scenario to a positive scenario, while the new video (Video 10) was a negative scenario (see Appendix IV). The other videos deemed credible (i.e., Videos 2, 5, 7, 8, and 9) remain intact. To conclude, the pilot interviews not only provided preliminary results on the video quality and HK residents' stereotypes of Mainland tourists, but also helped the researchers further improve the vignettes that would be used in the formal study.

4.3 Formal Interview Results on Video Quality

A total of 26 formal interview participants provided 60 observations. Each of the 10 videos adopted for the formal interviews was played six times, receiving comments from six

different interviewees. The analysis results of the 60 responses are reported in the two subsequent subsections. The questionnaire and interview results are presented separately.

4.3.1 Results from Questionnaire

The survey results from the formal interviews are displayed in Table 4. The internal consistency of the measurement scales for credibility, engagement, and identification was satisfactory (Cronbach's alphas were all above 0.86). The perceived credibility of all the videos exceeded 5.0, except for Videos 1 and 3. This result is consistent with the pilot responses, indicating that the HK residents were generally skeptical about the positive portrayal of Mainland tourists. Moreover, the viewers had a relatively low engagement with Videos 3 and 8; and low identification with the local characters in Videos 1, 8, and 9, probably because the characters were service staff not physically shown or passersby without noteworthy characteristics. All the manipulation questions were rated 5.5 or above, indicating a satisfactory understanding of the video content. The emotional responses exhibited patterns clearly consistent with the intended nature of each video. Specifically, the positive scenarios elicited positive emotions, whereas the negative vignettes provoked more negative emotions, thus providing additional evidence for successful manipulations.

INSERT TABLE 4

4.3.2 Results from Interviews

Similar to the quantitative results, the interview results also showed perceived improvements in the quality of the edited videos. For example, after Video 6 was split into two separate scenarios (i.e., Videos 6 and 10), the viewers did not report any difficulty in evaluating either of the videos. However, the credibility of Videos 1 and 3 remained

problematic. The viewers commented that the scenarios in the two videos were truly rare according to their own experiences (reflected in their unfamiliarity in Table 3). For Video 1, the interviewees commented on the HK lady and Mainlander mother's response to her son.

For example, three respondents pointed out:

*HK people generally do not take the initiative to talk to strangers...
Moreover, she speaks unnaturally – HK people speak in a more colloquial way. ... It is very rare to see such obedient kids and patient parents from Mainland – the video embellished them.*

It is not difficult to identify that the participants had both stereotypes of the in-group and out-group(s), while some of the stereotypical traits can only be activated/decoded in certain scenarios.

The low credibility of Video 3 was mainly attributed to the participants' stereotypes of smokers and Mainland tourists. The participants did not believe that smokers could restrain themselves from smoking nor that Mainland tourists would respect local regulations. In other words, aside from stereotypes of Mainland tourists, Video 3 triggered the participants' stereotypes of smokers. The video-vignette method, therefore, could reveal some unexpected results that may not be directly related to the current study objectives but provide the researchers with a more comprehensive understanding of the research participants. In addition, some of the viewers of Video 10 felt that the Mainland tourists were portrayed too negatively, because they had never seen young female Mainlanders try on cosmetic samples in the manner demonstrated in the video. Evidence suggested that these comments were based on the viewers' own experiences and existing stereotypes; therefore, they should not be attributed to the video quality. The comments may also reflect the existence of specific subcategories of HK residents' stereotypes of Mainland tourists, specifically, young well-dressed women are considered trendy and cultivated. This provides the researchers with additional opportunities to probe into residents' subtyping of tourists and/or attributional

inferences they made when confronting disconfirming instances unrepresentative of the entire group.

5. DISCUSSION AND CONCLUSION

This study introduced a comprehensive stepwise procedure for developing reliable and effective scripted video vignettes for tourism research, which can serve as a manual for future researchers adopting this method. Methodologically, scripted video vignettes may be most appropriate if causal relations between specific elements of embodied interactions and particular outcomes are of interest. Underpinned by a constructivism paradigm, the exemplar study involves a sensitive topic of intergroup stereotypes to obtain an in-depth understanding of host–tourist interactions. To achieve rigor and quality, the entire research process was clearly outlined from the initial point of conceptualization to the final stage of reflection. Each step was explicated such that the procedure would be replicable in the development and evaluation of other video vignettes. To the best of our knowledge, this is the first detailed description of a development process using multiple evaluation/validation tools to create theory-based true-to-life video vignettes for tourism research. The four core steps for creating scripted videos – developing scenarios, creating scripts, producing and validating videos, as well as specific activities attached to each step and lessons learned from our practice are summarized in Table 5 to facilitate future scholars’ adoption.

INSERT TABLE 5

5.1 Legitimacy of Exemplar Study adopting Video Vignettes

Stepwise verification during the data collection and analysis processes provided a system of reliability checks and balances, evidencing rigorous inquiry (Morse 2015). Specifically, the scripted video vignettes involved recordings of prewritten scenarios, in which actors mimicked interactions between tourists and residents, thereby providing an ethical alternative to manipulating host–tourist communications in the real world. The

tourist–host interactions shown in the videos were not fictitious or hypothetical but derived from the actual experiences reported by the residents who participated in the preliminary interviews. The validated videos convincingly showed multifaceted, embodied, and fluid tourist–host interactions and both parties’ diverse natural behavioral modes (e.g., micro behaviors and facial expressions) in natural settings and thus were evaluated by the participants as natural and engaging treatments. The three naturalistic dimensions suggested by Tunnell (1977), namely, natural behavior, setting, and treatment, were well integrated in this research design. Furthermore, multiple verification strategies were utilized during the processes of script creation, video production and testing, including peer expert reviews, investigator and methodological triangulations, and thick descriptions. For instance, overlapping questions were asked in both quantitative and qualitative ways to verify the video quality, such as attention focus and engagement level, the credibility of video vignettes, and the participants’ emotional and behavioral responses after viewing the videos. The two types of data can correct or verify each other.

More importantly, rich and convincing findings have been obtained from the formal study utilizing the 10 videos. The video vignette-induced interviews allowed the participants to express their opinions on tourists freely as a third-party observer rather than an actor. All the participants believed that their evaluation of the tourist–host interactions in the videos was impartial; they showed less reluctance to share additional impressions of Mainland tourists based on their own experiences. In addition, some judgements made by observing subtle signals during the tourist–host interactions in the videos are unlikely to be obtained by traditional methods. For instance, the viewers of Video 4 reported a stereotypical trait of “cunning” by carefully observing the whisper, eye contact, and gestures of the mother who teaches her son to jump the queue. The qualitative analysis of the interviewees’ comments revealed that the video vignettes also provided unexpected opportunities to deepen

understanding of residents' categorizing and subtyping tourists, as well as attributional inferences. Additionally, the analysis of the informants' facial expressions while watching the videos revealed implicit stereotypes and emotional responses that cannot be identified by traditional self-report methods (Zhang et al. 2021). The two-and-a-half system framework of cognition underpinning the visual methodology was thus substantiated.

Finally, the video vignettes allowed for standardization of materials (e.g., events, tourist characteristics, wording, and intonation), thereby creating opportunities to compare the results across individuals with varying observational capabilities or across time and space. The exemplar study can be replicated in the post-COVID-19 era to capture potential changes in HK residents' stereotypes of Mainland tourists. The video vignettes can also be shown to Mainlanders to explore their stereotypes of HK residents and self-stereotypes. To conclude, the accessibility, transferability, and reusability of video vignettes give researchers more opportunities to verify the legitimacy of research using these videos.

5.2 Implications and Conclusion

This study makes two significant contributions, namely, development directives and evaluation options for video vignettes. The first achievement is the comprehensive overview of a rigorous development process for scripted video vignettes, in which each of the four steps was elaborated and justified. Both advantages and limitations of the adopted approaches and potential alternatives (e.g., developing scenarios from emic stories versus from researchers' assumptions; hiring actors versus role playing by laypersons) were discussed for each step. This practice can help scholars make more informed methodological decisions in the future when developing video vignettes. Hillen et al. (2013) believed that high production costs may be the main reason for the limited adoption of video vignettes. The current study established action guidelines for facilitating optimal methodological choices and avoiding unnecessary waste of money and time. That is, Table 5 can be used as a checklist by future

scholars producing video vignettes for tourism research to ensure that all relevant issues are considered. The checklist has the potential to become a benchmark for such research, but it does not imply golden rules exist. For instance, professional filming crew and actors are not always necessary. Medical and education researchers often recruit real doctors–patients or teachers–students to film videos. Additionally, rapid advancements in video recording tools (e.g., increasingly capable smartphone cameras) and related technologies (e.g., user-friendly video editing software) can further reduce video production costs. The growing popularity of video-sharing apps and video bloggers has demonstrated that non-professional people can produce high-quality videos. Therefore, in the current trend of videoization, the wider application of video methods in tourism research is very promising.

Second, this study developed and tested a pool of quality indicators for video vignettes. Several rounds of credibility and validity checks were conducted during the four-step procedure. The pilot and formal interview results showed that most of the developed video vignettes were rated as having high quality – in terms of credibility, engagement, identification, and intended message delivery. Two positive vignettes scored relatively low in terms of credibility, which was caused not by the production process or recording techniques but by the generally negative stereotypes of the HK residents toward Mainland tourists. In addition to traditional quality indicators, this study designed descriptive and emotional response questions for each video according to their unique content. The implication of this technique is that pre-existing cognitive beliefs and assumptions about the portrayed content may interfere with the judgement of the credibility of scripted videos regardless of whether they were well produced.

Although the research objectives were achieved, room for further improvement exists in the research design and procedure. Main lessons learned from this study and recommendations are summarized and provided, respectively, below.

- 1) All the stories were extracted from the real-life examples provided by the study subjects to improve the vignettes' authenticity; thus, the script creation process was evidence based. As researchers' creativity is essential to produce natural and integrated real-world cases, expert reviewers with different backgrounds should be involved in the script creation, polishing, and pretest to strengthen the scripts' ecological validity. Although experts outside the research team were invited to comment on the scripts and video samples, the dialogue design could be improved if additional experts with the same background as the protagonists in the videos were consulted.
- 2) The authentic filming venues and professional actors contributed considerably to the perceived realism of the scenarios. However, the credibility of the video vignettes can be improved further if actors from the same geographic/cultural origin as the protagonists in the videos (i.e., Mainlanders in this study) can be employed.
- 3) The number and length of video vignettes should be considered carefully. The formal interview participants were required to view only two to three videos, because the pilot interviewees who watched four to five videos demonstrated fatigue after two or three videos, which led to a decline in the quality of the interviews as well as the carry-over effect from one vignette to another. Additionally, short vignettes with single events were preferred, because they can save time and avoid memory decay for the participants (Finch 1987; Zare 2019). The 10 short videos produced for this study were all under two minutes, which worked well for the respondent recruitment and response elicitation. However, Hughes and Huby (2004) suggested that long vignettes with continuous narrations are advantageous in keeping participants interested without supplying contextual materials repetitively (for each scenario) and in eliciting more detailed and complex insights into the specific topics. Long videos with more complex scenes could be produced and tested in the future.

To summarize, there is no one-size-fits-all standard on how to tackle methodological challenges when conducting video vignette-induced research. According to Hillen et al. (2013), the optimal approach of developing and applying video vignettes depends on the specific research objectives and realistic resource limitations. Despite the rigorous procedure and numerous video quality control measures, caution should be exercised when applying vignette-based findings to real-world complex settings outside specific vignette situations, because no vignette can completely capture the complexity of people's lives (Hughes and Huby 2004) or demonstrate equivalent relevance, familiarity, and universality to all viewers (Weber 1992). However, the four-step protocol developed and tested in this study can be used as a guiding principle for future studies.

This study represents the first attempt to raise awareness of and provide directions to tourism researchers on methodological issues that may be encountered when developing video vignettes. This study can be seen as part of the emerging contemporary push to use visual methods in tourism research more widely (Rakić and Chambers 2012). Jenkins et al. (2010) suggested the creation of highly complex and realistic vignettes through the use of new technologies such as video games and 3D images, but also recognized the increasing complexity of analyses. We contend that relatively straightforward video vignettes, such as the 10 clips produced for this study, can prosper in contemporary tourism research.

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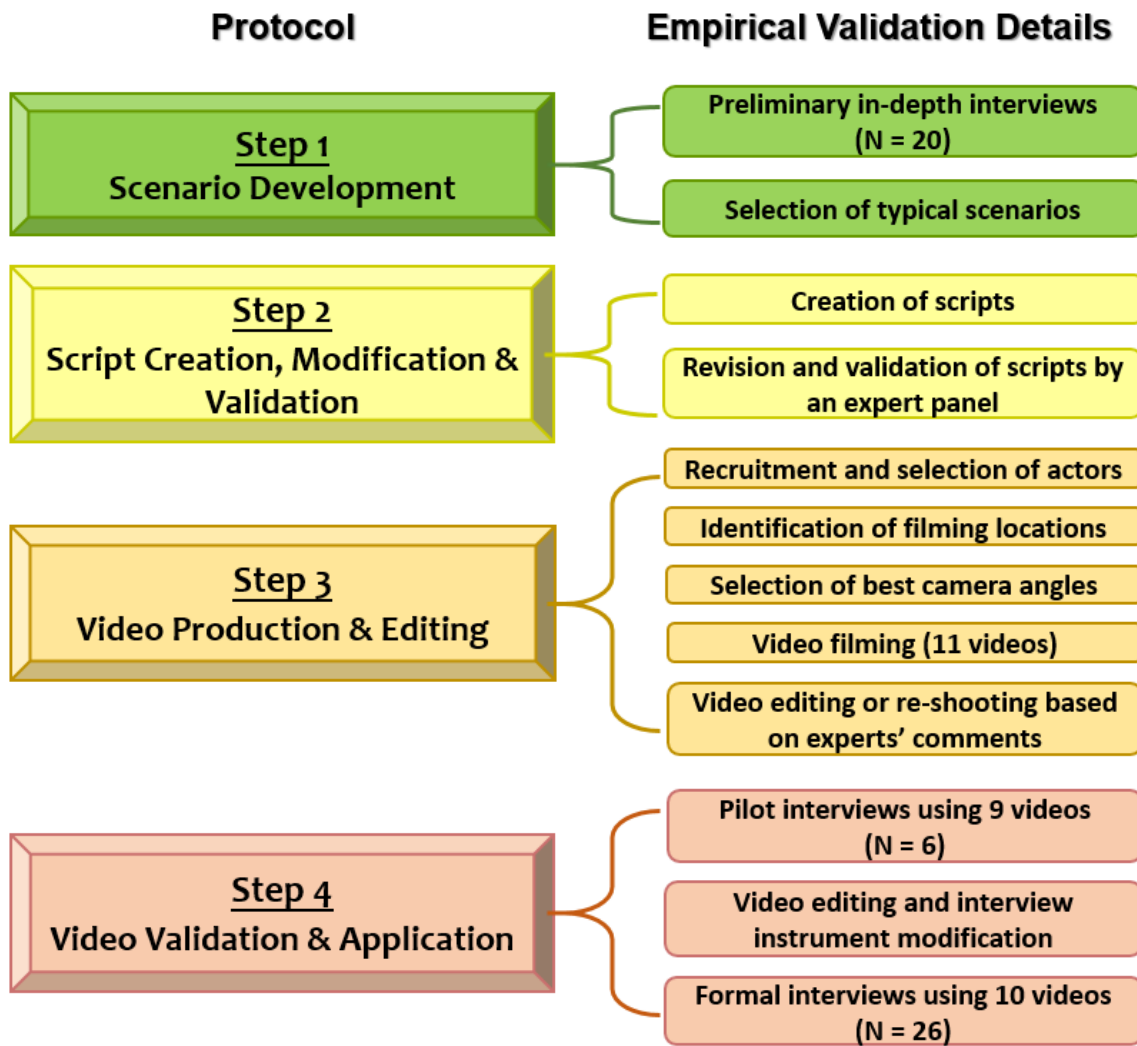


Figure 1. Four-step Video Vignette Development Procedure

Table 1.

Interviewee Profiles

| Demographics | | Preliminary Interviews for Scenario Development | Pilot Interviews Using Video Vignettes | Formal Interviews Using Video Vignettes | HK Census Statistics 2018 |
|---------------------------------|---|---|--|---|-------------------------------|
| | | (N = 20) | (N = 6) | (N = 26) | |
| Gender | <i>Male</i> | 6 (30%) | 3 (50.0%) | 12 (46.2%) | 45.7% |
| | <i>Female</i> | 14 (70%) | 3 (50.0%) | 14 (53.8%) | 54.3% |
| Age | <i>15–24 years</i> | 4 (20%) | 1 (16.7%) | 3 (12%) | 9.5% |
| | <i>25–34 years</i> | 10 (50%) | 3 (50.0%) | 7 (28%) | 14.1% |
| | <i>35–44 years</i> | 3 (15%) | 2 (33.3%) | 3 (12%) | 15.7% |
| | <i>45–54 years</i> | 1 (5%) | - | 4 (16%) | 15.6% |
| | <i>55–64 years</i> | 2 (10%) | - | 8 (32%) | 16.2% |
| Education | <i>Secondary school</i> | 1 (5%) | - | 5 (19.2%) | 49.0% |
| | <i>Diploma /Certificate/ Sub-degree</i> | 5 (25%) | - | 2 (3.8%) | 7.7% |
| | <i>Bachelor’s Degree and above</i> | 14 (70%) | 6 (100%) | 19 (73.1%) | 25.4% |
| Monthly Household Income (HK\$) | <i>19,999 and below</i> | 2 (10%) | 1 (16.7%) | 6 (23.1%) | 36.2% |
| | <i>20,000–29,999</i> | - | - | 6 (23.1%) | 15.8% |
| | <i>30,000–39,999</i> | 6 (30%) | 2 (33.3%) | 3 (11.5%) | 12.8% |
| | <i>40,000-49,999</i> | 1 (5%) | 1 (16.7%) | 4 (15.4%) | 9.3% |
| | <i>50,000-59,999</i> | 5 (25%) | 2 (33.3%) | 5 (19.2%) | 6.7% |
| | <i>60,000 and above</i> | 6 (30%) | - | 2 (7.7%) | 19.2% |
| | | | | | HKU 2018 Survey Result |
| Self-Identity | <i>Hong Kongers</i> | 15 (75%) | 4 (66.7%) | 15 (57.7%) | 40.0% |
| | <i>Hong Kongers but also Chinese</i> | - | 1 (16.7%) | 8 (30.8%) | 26.3% |
| | <i>Chinese but also Hong Kongers</i> | - | 1 (16.7%) | 3 (11.5%) | 16.9% |
| | <i>Chinese</i> | 2 (10%) | - | - | 15.1% |
| | <i>Other</i> | 3 (15%) | - | - | 1.7% |

Table 2.

Survey Results from Pilot Interview Participants (N = 6; 3 views per video)

| Video # | Brief Description of Video Vignettes | Intended Nature of the Vignette | CREDIBILITY (6 items) MEAN (SD) | ENGAGEMENT LEVEL (9 items) MEAN (SD) | MANIPULATION CHECKS (3–6 items each) MEAN (SD) | FEELINGS AFTER WATCHING VIDEOS (3 items) MEAN (SD) | STEREOTYPE CHANGE AFTER WATCHING VIDEOS* |
|---|---|----------------------------------|------------------------------------|---|---|---|--|
| V1 | ① An MC middle-aged man helps a local old lady with her big luggage; ② A couple on a train give her a seat; ③ The couple also educate their son to not defecate in the train. | Positive + | 4.22 (1.27) | 4.22 (0.59) | 6.22 (0.84) | 5.00 (0.88) | Better (2) No change (1) |
| V2 | Conflict between a young MC couple and a young HK man on a train | Negative/Neutral | 5.39 (1.42) | 4.63 (0.63) | 5.61 (0.63) | 3.22 (0.69) | No change (3) |
| V3 | An MC man looking for the smoking area in a park | Positive + | 3.39 (1.06) | 5.11 (1.50) | 6.67 (0.58) | 6.11 (0.84) | Better (2) No change (1) |
| V4 | An MC mother and her son jumping the queue at a tram station | Negative – | 6.67 (0.33) | 5.89 (1.93) | 6.89 (0.19) | 2.11 (1.17) | No change (3) |
| V5 | An MC mother letting her son defecate in a park | Negative – | 5.78 (1.00) | 5.19 (1.51) | 6.33 (0.31) | 1.67 (0.58) | No change (3) |
| V6 | ① Two young MC girls asking for directions politely; ② ** but then they try on cosmetic samples in a shop without using the appropriate tools. | Positive + & Negative/Neutral | 6.00 (1.32) | 5.96 (1.52) | 5.44 (0.48) | 3.78 (2.17) | No change (2) Worse (1) |
| V7 | Three MC women packing their suitcases on the street outside a pharmacy, blocking the pedestrian walkway. | Negative – | 6.94 (0.10) | 6.00 (0.84) | 6.13 (0.61) | 2.78 (0.69) | No change (3) |
| V8 | An MC couple staying in a luxury hotel; ① The woman asks for additional toiletries; ② The man smokes in a nonsmoking room. | Negative – | 5.94 (1.08) | 5.52 (1.30) | 6.39 (0.10) | 2.67 (0.67) | No change (3) |
| V9 | ① Two MC women staying in a luxury hotel talking loudly with their doors open and ② letting a kid run freely in the corridor. | Negative/Neutral | 5.67 (0.60) | 4.41 (0.56) | 5.80 (0.60) | 3.33 (0.58) | No change (3) |
| Overall mean | | | 5.56 (1.37) | 5.21 (1.23) | 6.17 | 3.41 (1.60) | / |
| Cronbach's alpha (α) | | | 0.891 | 0.923 | / | 0.972 | / |

Note: All means are calculated based on a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree).

** The numbers in parentheses represent the frequency of each answer; each video received three views.*

*** ② The second scenario in Video 6 was separated and used as Video 10 in the formal interviews.*

Table 3.

Video Quality Indicators

| | Pilot Interviews (6 interviewees; 3 views per video) | | | | | | Formal Interviews (26 interviewees; 6 views per video) | | | | | | |
|--------------|---|--------|-------------|-----------------------|-------------|------------|---|----------------------------------|--------|-------------|-----------------------|-------------|------------|
| | Identifying Mainland Tourists | | Credibility | | Familiarity | | | Identifying Mainland Tourists | | Credibility | | Familiarity | |
| | Yes | Unsure | Credible | Partially credible | Familiar | Unfamiliar | | Yes | Unsure | Credible | Partially credible | Familiar | Unfamiliar |
| V1 | 2 | 1 | 2 | 1 | 1 | 2 | V1 | 4 | 2 | 3 | 3 | 1 | 5 |
| V2 | 2 | 1 | 2 | 1 | 3 | 0 | V2 | 5 | 1 | 5 | 1 | 5 | 1 |
| V3 | 2 | 1 | 1 | 2 | 0 | 3 | V3 | 6 | 0 | 3 | 3 | 0 | 6 |
| V4 | 2 | 1 | 2 | 1 | 3 | 0 | V4 | 4 | 2 | 5 | 1 | 6 | 0 |
| V5 | 3 | 0 | 2 | 1 | 2 | 1 | V5 | 5 | 1 | 6 | 0 | 6 | 0 |
| V6 | 2 | 1 | 3 | 0 | 2 | 1 | V6 | 6 | 0 | 6 | 0 | 5 | 1 |
| V7 | 3 | 0 | 2 | 1 | 3 | 0 | V7 | 6 | 0 | 5 | 1 | 6 | 0 |
| V8 | 3 | 0 | 3 | 0 | 3 | 0 | V8 | 6 | 0 | 5 | 1 | 5 | 1 |
| V9 | 3 | 0 | 3 | 0 | 1 | 2 | V9 | 6 | 0 | 5 | 1 | 4 | 2 |
| | | | | | | | V10* | 5 | 1 | 4 | 2 | 4 | 2 |
| Total | 22 | 5 | 20 | 7 | 18 | 9 | | 53 | 7 | 47 | 13 | 42 | 18 |

*Note: * Second story of the original Video 6*

Table 4.

Survey Results from Formal Interview Participants (N = 26)

| | | V1 | V2 | V3 | V4 | V5 | V6 | V7 | V8 | V9 | V10 |
|--|-----------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Intended nature of the video vignettes | | Positive | Negative/Neutral | Positive | Negative | Negative | Positive | Negative | Negative | Negative/Neutral | Negative |
| Credibility <i>(8 items; Cronbach's alpha = 0.92)</i> | | 4.58 (1.83) | 5.69 (0.58) | 3.77 (1.24) | 5.52 (1.05) | 5.73 (0.50) | 6.17 (0.53) | 5.88 (0.81) | 5.67 (0.81) | 5.27 (1.63) | 5.57 (1.29) |
| Engagement Level <i>(9 items; Cronbach's alpha = 0.86)</i> | | 5.35 (1.25) | 5.32 (0.72) | 4.85 (0.86) | 5.37 (1.22) | 5.24 (0.63) | 5.70 (0.74) | 5.87 (0.80) | 4.80 (0.64) | 5.44 (1.05) | 6.10 (0.94) |
| Identification <i>(3 items; Cronbach's alpha = 0.92)</i> | | 4.94 (1.64) | 5.56 (0.75) | 5.39 (0.93) | 5.44 (1.29) | 5.00 (0.56) | 5.89 (0.62) | 5.22 (1.63) | 4.78 (1.26) | 4.78 (2.04) | 5.71 (1.25) |
| Manipulation Checks <i>(2–4 items for each video)</i> | | 6.33 (0.82) | 6.33 (0.63) | 6.00 (0.60) | 6.00 (0.84) | 6.17 (1.03) | 5.50 (0.55) | 6.06 (0.85) | 6.56 (0.78) | 6.22 (1.22) | 6.38 (0.45) |
| Emotional Responses ¹ | <i>Disgust</i> | | 4.60 | | 4.00 | 3.67 | | 4.00 | 4.40 | 3.75 | 4.29 |
| | <i>Contempt</i> | | 4.50 | | 4.50 | 3.50 | | 2.67 | 3.75 | 3.50 | 4.40 |
| | <i>Anger</i> | | 4.25 | | 5.00 | 3.33 | | 2.00 | 4.00 | | 4.33 |
| | <i>Hate</i> | | 4.33 | | 4.00 | 3.00 | | 2.00 | 4.00 | | 4.50 |
| | <i>Disappointment</i> | | 2.50 | | | 3.50 | | 3.00 | 4.33 | 5.00 | 4.50 |
| | <i>Embarrassment/Shame</i> | | | | | 3.00 | | | 4.00 | 5.00 | 5.00 |
| | * <i>Worry/Sadness/Compassion</i> | | 4.00 | | 5.00 | 3.13 | | 2.50 | 4.00 | | 4.50 |
| | * <i>Surprise/Wonderment</i> | 4.67 | | 4.25 | | | | 3.00 | 3.00 | 4.50 | 3.75 |
| | <i>Admiration</i> | 4.33 | | 4.00 | 4.00 | | 3.50 | | | 4.00 | |
| * <i>Relief/Tenderness</i> | 4.00 | | | | | 3.20 | | | | | |
| * <i>Pleasure/Joy</i> | 4.67 | | | | | 2.75 | | | | | |

Note: The cells with no value indicate that the corresponding emotions were not reported by the viewers.

¹ *Measured on the Geneva Emotion Wheel with 18 emotion terms on a five-point Likert scale ranging from “1 = weak” to “5 = strong”; means lower than “3” are in grey*

* *Emotion items combined because of similar valence and/or low frequency of being mentioned.*

Table 5.***Video Vignette Development: Steps, Activities, and Lessons Learned***

| Step | Activity | Lesson Learned |
|--|---|---|
| 1. Scenario Development | | |
| 1.1 Real-life examples collection | <i>Conduct individual in-depth interviews.</i> | [1] Informants should be invited to participate in the narrative interpretation. |
| 1.2 Scenario extraction and reorganization | <i>Merge similar stories, and connect logically sequential events/actions to reduce the number of informants' personal stories.</i> | |
| 2. Script Creation, Modification & Validation | | |
| 2.1 Scriptwriting | <i>Create storyboards, and establish character plot design, character dialogues, and behaviors.</i> | [2] The scripts should be consulted with the story providers (member checking) or experts with the same background as the protagonists in the videos. |
| 2.2 Script review and revision | <i>Read aloud and refine scripts</i> | |
| 2.3 Script validation | <i>Review scripts by external experts; test recording for further review</i> | [3] If there are explicit hypotheses to be tested, operationalizing manipulations must be clarified in the written scripts. |
| 3. Video Production & Editing | | |
| 3.1 Video recording preparation | <i>Recruit a film crew; cast actors; negotiate filming sites</i> | [4] Recruit real tourists if possible, because they may portray touristic behaviors realistically. |
| 3.2 Video recording | <i>Rehearse scripts on camera; test different camera angles</i> | |
| 3.3 Post-recording editing | <i>Cutting and editing; addition of subtitles; dubbing</i> | [5] Additional considerations should be given to the appearance of characters, which inevitably impacts viewers' perception. |
| 3.4 Expert review | <i>Re-filming and/or further editing based on experts' comments; Removal of unqualified videos</i> | |
| 4. Video Validation & Application | | |
| 4.1 Video pilot testing | <i>Determine number of videos per viewer and allocation strategy; inform/debrief viewers and conduct pre-post video study</i> | [6] The length and number of videos should be determined cautiously. |
| 4.2 Further video editing | <i>Edit problematic videos; revise survey instruments</i> | |
| 4.3 Formal video vignette-induced interviews | <i>Conduct video vignette-induced interviews with a supplementary survey.</i> | [7] A highly cinematic setting may be created to effectively immerse viewers. |