Dark tourism, emotions, and post-experience visitor effects in a sensitive geopolitical context: A Chinese case study

Abstract
Engaging the neglected intersection between dark tourism, the visitor post-experience and geopolitics, this research reports the findings from a survey of 1,082 domestic visitors to Lushun Prison Museum in Dalian, China, a Japanese-era incarceration and punishment site that projects hegemonic anti-Japanese social representations. Most respondents reported strong emotional reactions and elevated patriotism along with worsened attitudes toward Japan, Japanese products and, to a lesser degree, Japanese people, suggesting negative implications for the increasingly tense China-Japan bilateral relationship. However, sample diversity is indicated by the revelation of small Japan-neutral clusters whose members are more likely to express contemplation and pity as dominant emotions rather than the anger and hate of the majority, and who qualify the dominant social representations accordingly. Communist Party membership, age, lack of student affiliation, and not having Japanese friends or knowing any Japanese people were all associated with Japan-negative perceptions and intentions.

Key words: dark tourism, emotions, geopolitical sustainability, China, Japan, Second Sino-Japanese War, social representations
1. Introduction

This exploratory research lies at the previously unintegrated confluence of dark tourism, emotions, perceptions, visitor intentions and geopolitics. By their nature, dark tourism sites can elicit strong emotional reactions (Seaton, 2009), and it is often intended that they do so (Miles, 2002; Podoshen, 2013). No prior research, however, has examined the geopolitically-related perceptions and intentions that arise from these visits, or segmentation thereof, even though the selective presentations of heroism and atrocity that invite “appropriate” emotional responses and other demonstrations often implicate protagonists and antagonists whose nationalities or ethnicities, and alleged geopolitical agendas, are well illuminated (Austin, 2002; Kang et al, 2011). This supports Poria and Ashworth (2009) who contend that heritage sites, as political resources, can serve as obstacles to inter-cultural understanding.

The Lushun Prison Museum, a former Japanese-run incarceration site in the north-eastern Chinese city of Dalian, is the site selected to empirically investigate these relationships. The Museum represents a period of great suffering in China’s history, and one that continues to resonate into the present through unreconciled dominant wartime narratives and unresolved and growing geopolitical tensions between an ascendant China and a re-assertive Japan (Zhang, 2016). The investigated population consists of the approximately 500,000 annual domestic Chinese visitors who overwhelmingly dominate visitation to the site. Along with domestic visitors to similar sites in other parts of China, they constitute a large constituency for the dissemination of anti-Japanese social representations and, potentially, varying degrees of increased anti-Japanese sentiment. An understanding of these sentiments and their associations may help to facilitate reconciliation between the two countries. Following a literature review of dark tourism and its lack of conceptual and empirical attention to attendant emotional,
perceptual, intentional and geopolitical dimensions, the case study is described and research methods outlined. Subsequent sections present the results and consider their theoretical and practical implications.

2. Literature Review

Framed variably as a distinctively post-modern phenomenon (Lennon and Foley, 2000) or longstanding historical tradition (Seaton, 1996), dark tourism has attracted attention from academics and practitioners within wider contexts of heritage and historical tourism since the mid-1990s (Hartmann, 2014; Stone, 2013). Broadly, the term refers to tourism focused around sites of death and suffering. Implicated heritage attractions include those associated with war (Butler and Suntikul, 2012), which Smith (1998) describes as possibly the largest single type of tourist attraction, as well as former incarceration sites embodying policies of state-sanctioned punishment (Strange and Kempa, 2003), and cemeteries, where visitors experience the dead as proximate and ubiquitous (Seaton, 2002). Dark tourism also engages with sites of “unsanctioned” suffering involving such diverse phenomena as celebrity deaths (e.g. the Princess Diana crash and John Kennedy assassination sites), sensationalist and mass murders (e.g. Jack the Ripper’s London), and terrorist attacks (e.g. 9/11 sites in New York and Pennsylvania). In the Chinese-language literature, emphasis has been placed on earthquake sites and other natural disasters (Wang and Zhang, 2016; Wu, Li and Duan, 2016; Xu and Huang, 2014).

Salient diversity in the type of death and suffering is accompanied by recognition of variability in the intensity of the accompanying “darkness” (Miles, 2002; Sharpley, 2005; Stone, 2006), which Jamal and Lelo (2011) regard as a socially constructed concept and others as evidence of “dissonant heritage” (Tunbridge and Ashworth, 1996). The “darkest” tourism sites
are generally solemn and highly sanctified places of actual suffering where ideologically mediated narratives serve instrumentally to attract empathy, contemplation and transformation. Auschwitz and other in situ Holocaust sites are often cited in this regard as the ultimate manifestation of what Miles (2002) calls the “Dark Camps of Genocide” (Dalton, 2015; Knudsen, 2011; Stone, 2006). In contrast, the “lightest” dark tourism places are ephemeral and commercial “Dark Fun Factories” such as Dracula theme parks and wax museums that use entertainment sensationalistically to titillate thrill-seekers and the morbidly curious (Jamal and Tanase, 2005). The complex, contested and evolving dark tourism knowledge domain that is emerging (Stone, 2013) has invited extensive theoretical engagement around these issues of classification and nomenclature as well as the aforementioned question of origins. Linking dark tourism with the “sociology of death”, there has also been much discussion from a motivational perspective of the attractiveness of mortality and suffering, and the consumption of death, as paradoxical reaffirmations of life (Stone and Sharpley, 2008).

2.1 Dark tourism experience and emotion

Empirical studies to inform such deliberations, however, and particularly from an actual consumer experience perspective, have only recently gained traction (Biran, Poria and Oren, 2011; Cheal and Griffin, 2013; Kang et al, 2011). Many of these studies focus on the pre-experiential dimensions of motivation and expectation, and include solicitations of learning, historical interest and fascination with the morbid among visitors to Australia’s convict era Port Arthur site (Preece and Price, 2005), learning and understanding, verification (did the atrocities really happen?), experiencing a famous site and experiencing emotion among actual and potential Auschwitz visitors (Biran, Poria and Oren, 2011), experiencing a sense of belonging
among African-American visitors to slaving sites in Ghana (Austin, 2002), and desire to learn, obligation, social pressure and curiosity among domestic visitors to Jeju April 3rd Peace Park in South Korea (Kang et al, 2011).

Relatively less is known about the actual dark tourism experience, including the elicitation of emotions and subsequent post-experience effects on the visitor. The idea of “aura”, or emotion or mood conveyed, is an important theoretical construct in heritage tourism (Poria and Ashworth, 2009) and dark tourism more specifically (Seaton, 2009). Miles (2002) and Podoshen (2013) contend that engendering empathy and provoking other desirable emotional responses from visitors is not just a logical outcome of exposure to dark attractions but an essential function of product display and its “hot interpretation” (Uzzell, 1989). This is because “emotion is a complex psychological phenomenon that motivates us to behave in a manner consistent with our social beliefs about specific situations and which may also influence our decision making (Austin, 2002, 448).” The trauma of experiencing a Holocaust site, for example, may motivate the visitor to become more active in the cause of world peace. Tarlow (2005, 48) goes as far as to argue that dark tourism should only be concerned with sites where the attendant death and suffering serve to “continue to impact our lives”, hence gaining a kind of paradoxical immortality.

Given this centrality of emotion, and its increased engagement in the broader tourism literature (Kim and Fesenmaier, 2015; Nawijn et al, 2013; Prayag et al, 2017; Shakeela and Weaver, 2012), the related empirical research in the dark tourism arena is now moving beyond the incipience that Stone and Sharpley (2008) ascribed to the early 2000s. Substantive challenges remain, however, because emotions tend to be ephemeral, often difficult to solicit and measure despite the increased use of physiological instruments (Kim and Fesenmaier, 2015), and
incompatible with imaginings of the “rational man” that many social scientists like to interrogate (Nawijn et al, 2013; Podoshen et al, 2015). Holocaust sites, unsurprisingly, feature prominently and include indications of intense and cathartic emotional reaction from Holocaust survivors during *in situ* site visits in Europe, frequently triggered by catalytic moments such as seeing a museum photo displaying members of the survivor’s family (Kidron, 2013). Elevated affective responses have also been noted among non-Jewish visitors (Knudsen, 2011), even in spatially decontextualized settings such as the Holocaust Museum in Washington DC (Lennon and Foley, 1999) and *Shoah* sites in Jerusalem (Cohen, 2011).

Among other settings, domestic visitors to Jeju April 3rd Peace Park in South Korea, which commemorates the deaths of 30,000 local people at the hands of the government in the late 1940s, expressed feelings of fear (for what happened), sorrow, sympathy, depression and appreciation (for the peaceful present) (Kang et al, 2011). Comparatively, African-Americans during visits to slavery era sites on the coast of Ghana have been found to experience stronger and more personalized emotions than their Caucasian counterparts (Austin, 2002; Yankholmes and McKercher, 2015). At the Australian convict era site of Port Arthur, the strongest emotions were generated when the visitors found out about the on-site 1996 massacre of 35 people (Preece and Price, 2005). Similarly, feelings of pride and sense of loss among Australian visitors to Gallipoli were animated especially during cemetery visits and in the presence of other Australians (Cheal and Griffin, 2013). Emotional contagion effects, where affect sharing is induced by the perception of the emotional state of another person (Singer, 2006), were also observed among attendees at a dystopic “black metal” music festival in Europe (Podoshen, 2013). In all such studies as well as those related to motivations and the post-experience, segmentation where it is conducted is confined to identifying differences between major visitor
types, such as diasporic Africans and Caucasians in Ghana slaving sites, and Holocaust survivors
and non-Jewish visitors in Holocaust sites, rather than in-group differences.

2.2 Dark tourism post-experience and geopolitics

The aforementioned Gallipoli study (Cheal and Griffin, 2013) is among the very few that
consider post-visit effects, with many interviewed afterwards claiming that they subsequently
viewed ANZAC Day more as a time for solemn commemoration and reflection, as intended by
event organizers, than a public holiday. In the broader tourism literature, the post-experience
phase is a topic of much importance centered largely on questions of satisfaction,
product/experience perception, re-visitation and recommendation intentions, and other reactions
that configure a broader construct of consumer loyalty (Baker and Crompton, 2000; Chen and
Chen, 2010; Petrick, 2004). Such dimensions are relevant to dark tourism contexts, but the often
non-commercial, sanctified and solemn nature of the latter, as evidenced by the experience of
Holocaust sites and Gallipoli, suggest a need to look more closely beyond these conventional
commercial parameters to “higher order” visitor effects such as self-reflection, personal
transformation, increased activism, reconsideration of intercultural perceptions, and elevated
sense of patriotism and national or ethnic identity.

As these outcomes are often deliberately cultivated by site managers through product
selection and interpretation, it would appear as if geopolitical perspectives are warranted in such
investigations. A geopolitical component, often latent, can be found in much tourism research
(Weaver, 2010), as for example in speculation that Holocaust remembrance sites in the US have
been used to create support for the state of Israel (Lennon and Foley, 1999), in the aspirational
capacity of tourism to function as a vehicle for global and bilateral peace (Kang et al, 2011; Kim,
Prideaux and Prideaux, 2007; Uriely, Maoz and Reichel, 2009) and in Poria and Ashworth’s (2009) assessment of heritage tourism sites as potential sources of international conflict. Kim, Prideaux and Timothy (2016), more broadly, advocate further investigation of geopolitics and other non-economic factors as significant influences on changing bilateral tourism flows.

The peace dimension is also evident in domestic contexts, wherein war or battle commemorations and visits to iconic national sites in capital cities and elsewhere can serve to stimulate feelings of national unity and patriotism (Cheal and Griffin, 2013; Chronis, 2005; Slade, 2003). Biran et al (2011), however, contend that this dimension has been neglected if not ignored altogether in the dark tourism literature. This neglect is unfortunate, since such geopolitical ramifications at the national level can undermine international and global aspirations of peace if the patriotism it entails concurrently entertains the demonization of featured or implied antagonist groups. Holocaust site focus on Nazi atrocities, for example, might intend to foster support for world peace and the end of genocide but can also engender hate among some visitors for ethnic Germans in general. Often, the demonization is intentional. Dark tourism sites in Vietnam, for example, are carefully orchestrated places of little subtlety that emphasize an official ethos of reconciliation and solidarity between “ordinary” Vietnamese and American people but simultaneously portray period American soldiers and their government as “villains” and perpetrators of war crimes; conflicting emotional states in both domestic and American visitors are common results (Schwenkel, 2009). The removal in some Vietnamese museums of “Chinese aggression” exhibits in 1991, corresponding to improved relations between Vietnam and China following a brief border war, confirms further that “the function of the museum is not only to document history, but also to mobilize sentiment, such as anger, suspicion, or pride (Schwenkel, 2009, 161)” in tandem with shifting political circumstances and machinations.
2.3 Research purpose and conceptual framework

This exploratory research hopes to make a significant contribution to the literature by identifying how exposure to relevant dark tourism heritage sites differentially influences visitors in ways that have substantial geopolitical implications for implicated parties. The accompanying conceptual framework in Figure 1 depicts initially a basic scaffolding (non-italicized font) for visits of this kind, informed by the existing literature. The first proposition is that learning and education, as per Biran, Poria and Oren (2011), Preece and Price (2005) and Kang et al (2011), are situated as primary motivators especially to those sites that qualify as dark camps of genocide (Males, 2002). Second, strong emotional reactions result from these visits (Podoshen, 2013; Seaton, 2009) and are induced or amplified by exposure to catalytic displays (Kidron, 2013) and emotional contagion effects (Cheal and Griffin, 2013; Podoshen, 2013). Third, these reactions have significant post-experience effects on the visitor (Cheal and Griffin, 2013).

(Figure 1 about here)

Our superimposed geopolitical context for the research (italicized text), subsequently, demarcates salient “antagonist” and “protagonist” elements as per Poria and Ashworth (2009) to culturally contextualize the affiliated geopolitical implications. Here, visitor segments aligned with the protagonist element are alleged to have existing biases against the featured antagonist. The anticipated strong emotional responses of this group (Austin, 2002; Kidron, 2013; Yankholmes and McKercher, 2015) from exposure to the overall site, its catalytic displays and fellow visitors, accordingly, will be negative ones directed to the antagonist element. The
resultant internal and external post-experience effects, finally, will respectively indicate
reinforcement of patriotism as per Cheal and Griffin (2013), Chronis (2005) and Slade (2003),
but also amplification of the accompanying negative biases.

Social representations theory provides a relevant overriding conceptual framework
hitherto absent in the dark tourism literature. This holds that people are influenced by socially-
mediated mental constructs (social representations) which serve as basic cognitive units for
making sense of the world around them and constructing “reality” accordingly (Moscovici, 2001).
These shared frames of reference provide “acceptable” guidelines for reacting to and
coping with otherwise traumatic or confounding new information (Moscardo, 2011). Especially
influential are “hegemonic” representations sanctioned and projected by political or moral
characterize as “propaganda” discourses, are projected at Holocaust sites and Gallipoli but also
resonate as per Figure 1 in situations, such as Vietnamese war atrocity museums, where
emphasis on long-cultivated protagonist-antagonistic dualities serves to reinforce desired social
outcomes such as patriotism and bias against the antagonist.

3. Case Study

A case study approach is adopted in this research because it facilitates in-depth empirical
engagement with the topic within a relevant “real world” setting (Jennings, 2010). Such
examination of the specific is especially suitable for illuminating general issues of an exploratory
nature (Beeton, 2005). The Japanese and Russian Prison Site Museum in Lushun, north-eastern
China (henceforth Lushun Prison Museum or LPM), was selected as the case study to pursue this
research. Although the prison complex was established by the Russian government in 1902, the
museum has focused since its initial opening in 1971 on the use of the facility by the occupying Japanese in the 1930s and early 1940s to incarcerate and punish Chinese and Korean residents who resisted that occupation. According to the attraction’s website and interviews with senior managers of the site, the LPM currently functions as a historical research facility and is intended to foster “national patriotism education” by exposing the over 500,000 annual and overwhelmingly domestic visitors (about 95% according to the managers) to guided tours of prisoner cells, instruments of torture, indoctrination centres, medical wards, execution chambers and forced labor factories, as well as exhibits featuring some of the more prominent prisoners. The maintenance of mostly original prison conditions, and the concurrent poor quality of the lighting and lack of air conditioning (experienced by the authors during personal summer visits), add to the site’s authenticity and emotional import.

The site, therefore, was selected because it qualifies as one of Miles’ (2002) Dark Camps of Genocide which employs hegemonic social representations about the China-Japan historical relationship to invoke and excite strong affectations among its mainly domestic visitors. The latter belong to a collectivist culture where such affectations are likely to be widely shared and socially sanctioned (Michailova and Hutchings, 2006). Ironically, the Second Sino-Japanese War of 1937-1945 was suppressed as a topic of public discourse by the victorious Communist government but was animated during the period of liberalization that followed the death of Chairman Mao (Coble, 2007). Subsequent aspirations for restored Great Power status have been well served by an accompanying culture of “victimization” which emphasizes the tragedies visited upon a weak China and has given rise to a “strong patriotic nationalist narrative” (Coble, 2007, 403) that should help ensure it never happens again. Nor is this posturing unwarranted; the war years, still within the living memory of many Chinese, was a period of extreme suffering in
which by official estimate some 35 million casualties were endured. Moreover, and unlike their German Axis counterparts, the Japanese have never admitted their culpability as aggressors and war crime perpetrators, leaving the war suspended as “unfinished business” that is implicated in escalating concurrent geopolitical tensions over the sovereignty of offshore islands and other bilateral disputes (Cooper, 2007; Kim, Prideaux and Timothy, 2016; Zhang, 2016).

The LPM is just one of many high-visitation dark World War Two-era heritage tourism sites in China, some with less-than-subtle names (for example, “Memorial Hall of the Victims in Nanjing Massacre by Japanese Invaders” [Nanjing], and “Museum of the War of Chinese People’s Resistance Against Japanese Aggression” [Beijing]) that betray transparent propaganda discourses and make little or no attempt to include alternative narratives. Atrocity sites in this context can serve a significant role in eliciting strong responses and shaping domestic attitudes toward the Motherland as well as Japan, giving credence to Weaver et al (2015) who argue that confronting the “geopolitical Chinese Dream” should be a priority topic of Chinese tourism research. Such investigations, however, remain incipient. Among the few examples are Zheng et al (2016) and Fang et al (2013) who identified among domestic visitors to the Memorial Hall in Nanjing an association between strong emotional reactions and motivations focused on obligation and responsibility rather than education or social interaction.

4. Methods

The on-site post-visit questionnaire (Appendix 1) was informed by a pilot survey completed by 108 randomly selected visitors two weeks prior to the main surveying phase. Aside from ensuring text clarity and confirming an acceptably brief average completion time of 10 minutes, the pilot survey in an open-ended question identified anger, hatred, sadness, shock, pity,
depression, and contemplation as the most prevalent felt emotions. These were therefore the supplied options in the main questionnaire, which retained the open-ended option. Motivation and recommendation items in the main survey were similarly informed. We note that several members of the author team are native Chinese speakers who are also fluent in English as a second language; hence there were no substantive problems encountered with translation from Chinese to English for purposes of manuscript preparation for an English language journal.

Administratively, the pilot phase also provided valuable training for the recruited student assistants, and prompted the establishment of a shaded seating area by the exit as a comfortable location for post-visit questionnaire completion, often while waiting for tour bus arrival. Initial face-to-face interception of departing visitors was rejected because of intermittent high traffic (especially when concurrent group tours were concluding) that made impractical the interception of every n\textsuperscript{th} visitor or otherwise obtaining a purely random sample. Prominent invitation signage next to the seating area, instead, successfully attracted participants, and resultant self-selection bias was at least partially addressed by low-key solicitations to members of groups (e.g. older people, males) who appeared less inclined to participate, though no specific quotas were set. It was also found necessary to train students to assist older visitors with low literacy skills to complete the survey by reading out the questions and writing in their answers.

The final questionnaire draft opened with standard brief questions about visit motivation, prior visitation, purpose and length of visit, and group composition, and then focused on resultant emotions and trigger display(s), if any. The emotion options were positioned near the beginning of the final questionnaire to better ensure accurate recall and residuality of the experienced emotions. Subsequent questions solicited prior knowledge of the war and LPM as well as pre-visit attitudes toward Japan, Japanese people and Japanese products as well as
proclivities to recommend LPM to others. Eight Likert-scale (5-point) questions about post-visit attitudes and intentions followed. Existing literature, as befits the exploratory nature of the research, did not yield any candidate items or scales, so the following five items were included in the clustering exercise (see below) to reflect the research focus on changed perceptions of Japan and Japanese resulting from the LPM visit:

a) Having a more negative perception of Japan as a country,
b) Being more likely to visit Japan as a tourist in the future,
c) Being less likely to feel friendly toward Japanese tourists visiting China,
d) Having a more negative opinion about Japanese people in general, and
e) Purchasing fewer Japanese-made products.

Pre-visit attitudes were solicited only for items (a), (d) and (e) due to pilot study results where some informants, acknowledging the emotional nature of their LPM experience, were still confident about expressing accurate general pre-visit sentiments about Japan, Japanese people and Japanese products, but not the more personal questions involving friendliness or intention to visit. Relevant subsequent sections of the questionnaire solicited prior experience with visiting Japan, having Japanese friends or colleagues, and socio-demographic characteristics of respondents, including membership in the Chinese Communist Party. Respondents were also asked to provide an email contact address if they were willing to participate in a short near-future interview to elaborate on their responses.

An on-site post-visit paper questionnaire was administered during the summer of 2016 to visitors 16 years of age or older. The objective was at least 1,000 valid responses, to allow in the segmentation exercise for the potential identification of important clusters that are relatively
small but large enough to be compared statistically with other clusters. The surveying was conducted by five trained graduate students of the host university under the supervision of a full-time faculty member who is also one of the authors. All authors, moreover, had personally visited the LPM at least twice to gain insight into the visitor experience. The logic of in situ distribution and completion was to capture immediate post-visit emotional states as well as maximize clarity of experience recollection (e.g. time spent, group composition, etc.) and completion rates; for example Weaver (2013) used an online survey link to examine protected area visitors, yet of those who agreed to complete the survey, only one in three actually did.

Beyond overall frequencies and means, cluster analysis was used to identify respondent variations with regard to selected post-visit perception and intention statements, which were designed for 5-point Likert-scale responses ranging from “strongly agree” to “strongly disagree”. Such segmentation recognizes that tourist markets are heterogeneous beyond obvious geographic demarcations and that it is therefore prudent to identify relatively uniform sub-markets segmented by other meaningful criteria such as behavior, intention, perception and motivation (Yankhloemes and McKercher, 2015). Cluster analysis (CA), the most prevalent multivariate segmentation technique-set in the social sciences, including tourism studies, seeks to maximize intra-group homogeneity and inter-group heterogeneity; hierarchical CA is used here because of its suitability in exploratory research where the “correct” number of clusters is unknown (Fredline, 2012). “Correct” solutions are based on the items selected for the exercise but also assessment of factors such as interpretability, cluster size, dendogram structure and presence of statistically significant differences between the clusters (Kaufman and Rousseeuw, 2005).
5. Results

Between 26 and 28 August 2016, 1,219 responses were received, of which 1,082 were valid. Email addresses were provided by 200 respondents, 12 of whom participated in follow-up interviews. Table 1 provides demographic and other information about the sample. High levels of university qualification corroborate earlier findings that museum visitors in China have substantially higher educational attainment than the general adult population (Chen, Li and Zhang, 2012), about one-third of whom have a university degree (National Bureau of Statistics of China, 2017). All respondents answered the question about Chinese Communist Party affiliation, while reported incomes are in tandem with China’s average individual income of 1,985 RMB in 2016 (National Bureau of Statistics of China, 2017). Museum managers emphasized to us that visitor details such as age, gender, education and income were not collected or compiled due to budget restrictions, but concurred that the preceding characteristics were probably typical of adult visitors based on their collective personal experience with the site and interactions with visitors. Representativeness of the sample is thereby indicated though not assured.

(Table 1 about here)

Table 2 summarizes selected sample visit characteristics. Education was cited as the main motivation by a slim majority of respondents, most of whom were first-time visitors to LPM. Most respondents also claimed limited knowledge of the Second Sino-Japanese War, while almost one-half had similar knowledge about LPM. Multiple negative emotions were experienced by almost all of the sampled visitors, who also typically mentioned more than one
display that triggered these responses. The emotional responses of other visitors, widely noted, affected the emotional reactions of these observers. As depicted in Table 3, pre-visit attitudes toward Japan, Japanese products and Japanese people were generally negative, though less so for the latter. Post-visit attitudes and intentions, overall, became even more negative, though less so for visiting Japan or for feeling friendly toward Japanese tourists (26.3% disagreed or strongly disagreed that they became more negative toward them).

(Table 2 about here)

(Table 3 about here)

5.1 Segmentation results

A five-cluster solution most effectively differentiated the sample (Table 4). The ratio of 216 respondents per item used in the cluster analysis significantly exceeds the threshold of 70 recommended by Dolnicar et al (2014) for maximizing validity, which also derives from the significant inter-cluster differences attained on all items used in the exercise, and the interpretability of the cluster outcomes. Pre-visit attitudes and other variables contributed along with these five items to cluster interpretation and labelling. Cluster 1, accounting for 21.3% of the sample, displayed already very strong pre-visit anti-Japanese perceptions that were amplified by the visit (Table 5); accordingly they can be labeled as “Japan-negative unequivocals”.

(Table 4 about here)

(Table 5 about here)
Cluster 2, with 12.9% of respondents, is also negative toward Japan but less so than the first cluster. The major departure is a strong intention to visit Japan in the future. Unlike these “Japan-negative visit-conditionals”, the negativity of Cluster 3, which is the largest sub-group at 36.9% of the sample, is tempered further by slightly positive effects about feeling friendly toward Japanese people (though here there is little desire to visit Japan); they can therefore be described as “Japan-negative friendliness-conditionals”.

Cluster 4, with about one-quarter of respondents (24.5%), incorporates “Japan-neutral ambivalents” who are unsure whether the visit amplified or reduced their neutrality. Finally, Cluster 5, by far the smallest segment (4.4%), consists of those with neutral or weakly positive pre-visit attitudes that did not decline as a result of the visit, and who can therefore be described simply as “Japan-neutrals”.

Differentiation by emotion is strongly evident (Table 6), with the more Japan-negative clusters displaying significantly higher hatred and anger, and the more Japan-neutral clusters indicating greater depression, contemplation and pity. There were no statistically significant differences for sadness, shock or lack of emotion. Emotional contagion effects were most strongly evident in the Japan-negative clusters. For visit purpose, there were no differences in expanding knowledge or curiosity, but Cluster 2 members were more likely (17.9%) to be members of school tours, especially in comparison with Cluster 5 (2.1%). The Japan-neutral clusters are positively associated with being a student, having Japanese friends and personally knowing Japanese people, and negatively associated with age, Party membership and elevated patriotism (Table 7).

(Table 6 about here)
6. Discussion

Figure 2 summarizes the study results. Negative feelings about Japan, Japanese people and Japanese products were widespread in the sample prior to their visit, reflecting the generally negative views of Chinese people toward Japan (Kim, Prideaux and Timothy, 2016) and likely indicating longstanding exposure to hegemonic anti-Japanese social representations emphasizing the Second Sino-Japanese War. A sense of national identification with the era and its concomitant humiliations has been strongly inculcated through the education system (Wang, 2008) and official media (Wang and Wang, 2014). One Japan-negative unequivocal explained their pre-visit antagonism toward Japan as follows: “I hate Japan because of the war history, and this history will never disappear”. The dominant visit motivation of “expanding knowledge” suggests similar referents, especially given the prevalence of remembering China’s humiliation and having a patriotic education as reasons for recommending LPM to others.

Japan-negative social representations permeate the LPM Dark Camp of Genocide itself, and as anticipated generate ubiquitous strong emotional reactions in association with widespread emotional contagion effects as per Cheal and Griffin (2015) and Podoshen (2013) as well as trigger or catalyst effects as per Kidron (2013) and Preece and Price (2005). The latter occur especially during exposure to instruments of torture and death. The immediate affective outcomes are dominantly “dark emotions” of anger and hate that were hitherto less explicit in the
dark tourism emotion literature. These sentiments have negative import from a geopolitical perspective because they are emoted in relation to a specific antagonist (Japan/Japanese) which embodies the object of the anger and hatred. This is different than the widespread depression, sadness and shock also felt at LPM but expressed more commonly in the dark tourism literature, which indicate a more introspective and victim-focused reaction to unfathomable events such as the Holocaust and a concomitant desire, perhaps, that such atrocity should never occur again.

Significant post-visit changes in attitude and intention are evident. Explicitly attempting to encourage and stimulate patriotism in tandem with official rhetoric, LPM is apparently very successful in doing so as reflected additionally in majority inclinations to recommend LPM to others for patriotic reasons. This extends to atrocity sites the findings of high patriotic feelings that are found in iconic battlefields such as Gallipoli (Cheal and Griffin, 2013; Slade, 2003). Prior conditioning and present site orchestration, in these atrocity settings, serve collectively to reinforce already high levels of patriotic feeling and antipathy toward the country of Japan during a time of increasing bilateral tension. It can also be ventured in association with Stone and Sharpley (2008) that LPM and similar sites are indeed reaffirmations of life, but specifically of the prosperous and peaceful contemporary life – the Chinese Dream – made possible in official discourse through the benevolent leadership of recent Chinese governments.

Nowhere in the LPM marketing material or in interviews with management were there explicit statements about intentions to incite anger or hatred toward Japan or Japanese people. However, the emotional responses as per Tables 2 and 3 are associated with even worsened perceptions of and intentions toward the Japan-Japanese antagonist. As stated by Japan-negative unequivocals several months after their visit: “I hate the Japanese more because I did not expect them to be so cruel; they killed Chinese as a kind of fun”, “Chinese people should not forget this
history... The Japanese people significantly hurt the Chinese people during the war” and “After visiting the museum I learnt that Japanese people were heartless and cruel and treated Chinese badly; I strongly hate them from my deep heart”. Such effects, however, are not uniform across variables or respondents despite the collective nature of Chinese society. Feelings and intentions toward the Japanese people, though not exactly amicable, are not as negatively felt as toward the country or products of Japan. Indeed, those who have Japanese friends or know Japanese people personally are less likely to express these negative sentiments. This might also indicate recognition that while the current Japanese people are not the same Japanese who perpetrated war atrocities, the current Japan is the same Japan that orchestrated those atrocities and still refuses to apologize to and reconcile with the Chinese (Cooper, 2007). Emphasizing the continuing misdeeds of Japan’s government, one Japan-negative unequivocal expressed their belief that “the education system in Japan will pass such kind of rude and brutal personal characteristics [as witnessed in LPM] to the next generation”.

Among the respondents, the hate-anger response is prominent among the three Japan-negative clusters. Japan-negative unequivocals display the most anti-Japanese sentiment and reflect an uncompromising reception of the attendant hegemonic social representations. Membership in this cluster is strongly related to formal affiliation with the Communist Party of China, an organization epitomizing fidelity to the government’s proclaimed worldview. Older respondents are also implicated, perhaps because of greater connectivity through family memory to the War. Selectively qualified receptions are evident among Japan-negative visit-conditionals and friendliness-conditionals, who deviate from the unequivocals by their desire to visit Japan and unwillingness to be unfriendly toward Japanese tourists, respectively. One friendliness-conditional regarded those tourists as a meritorious subset of the Japanese population, stating, in
a way that affirms those who advocate for tourism as a force for world peace, that “Japanese people who visit China probably are friendly to China and have a positive attitude toward the Chinese, so we should be friendly to them”.

More broadly qualified receptions of the social representations are displayed by the two Japan-neutral clusters, whose members are far more likely to exhibit the contemplation and pity that associate with a more measured assessment of the antagonistic party and its alleged misdeeds. The LPM visit elevated their patriotism but did not alter already less hostile pre-visit attitudes and intentions. These respondents are more likely to be students and to have Japanese friends or know Japanese people, suggesting that concerted knowledge seeking (i.e., being open to other social representations) and direct experience can modify dominant social representations by providing countervailing evidence (Fredline and Faulkner, 2000). Relevant nuance was provided by a Japan-neutral ambivalent who explained that “China is now much stronger and developing significantly; such history therefore will not appear again”. This indicates a paradoxical sentiment of confidence in China’s ascendancy that challenges an official narrative of victimization and implied insecurity without marginalizing the more dominant – and socially desirable – narratives of patriotism and national pride.

7. Conclusion

Our empirical research addresses calls by Kim, Prideaux and Timothy (2016) for more attention to the geopolitical factors that can influence bilateral tourism flows, and does so within a dark tourism context, affirming as per Tarlow (2005) the status of LPM as a true dark tourism place that continues to impact the lives of those who visit. More specifically, it is believed the findings make substantive contributions to the literature by demonstrating that the social
representations projected at sites such as LPM are mediated by highly subjective and politically motivated deliberations that substantively influence the experience of most visitors (Poria, Biran and Reichel, 2009). The overall effect appears geopolitically rational at the national level due to reinforced patriotism, but potentially destabilizing at the international level insofar as it dissuades the good relations that might result from positive personal engagement with Japan through visits to Japan and friendliness to Japanese tourists.

Yet, these results are not uniform. On the demand side, the open-minded student might serve as a counterpoint to the obedient Party member in demonstrating the possibilities for a more optimal outcome combining patriotism and qualification. On the supply side, deep intervention in dark tourism sites is advocated by some Chinese scholars who contend that government is the most effective vehicle for appropriately educating the public while taking into account the feelings of residents and others personally affected (He, 2012; Hu and Luo, 2007). We concur in principle but recommend a diversification of what is presented to include voices of Japanese resistance and even those perhaps of Chinese collaboration, so that more nuanced hero/enemy assessments can be made in the interests of bilateral reconciliation.

Regarding limitations, case study outcomes reflect in-depth involvement but are fundamentally idiosyncratic and not amenable to generalization (Beeton, 2005; Jennings, 2010); timely extension of the research into similar atrocity sites in Beijing and Nanjing is therefore warranted. Another constraint is the confinement of the sample to domestic Chinese visitors. Other nationalities are not well represented at LPM, but interrogation of their experience may reveal significant commonalities and differences that further illuminate the general issue. The need for convenience sampling, moreover, may have created response biases, with those feeling strongly about their experience being perhaps more likely to participate, although such bias was
not apparent in the pilot survey. Even if the sample is representative, extrapolations to the
general population are impeded by the non-representativeness of museum visitors especially with
regard to education levels. Also pertinent are not including physiological means to measure
emotional intensity even though they may more reliably assess this (Picard, 2010), low
participation in follow-up interviews, possible bias in responses about pre-visit attitudes due to
asking about these after the visit, and the lack of inevitability that subjective intentions will
translate into subsequent behavior.

A broader behavioral consideration though not a limitation as such is durability of
emotion and its effects. Anger and hate, in particular, tend to be ephemeral; so, are intentions and
perceptions expressed in the “heat of the moment” likely to be acted upon, especially if they
involve the future and the hypothetical? It would be useful in this light, as per Podoshen et al
(2015), to more thoroughly interrogate through in-depth interviews the “mood” that prevails one
month or longer after the visit, and the revisitation of perceptions and intentions that occurs with
the passage of time. Finally, as our research indicates Party affiliation to be a significant trait that
Chinese respondents are willing to reveal, we recommend more widespread use of this variable
by researchers to better understand behavioral and attitudinal segmentation in mainland China
contexts.

References
Austin, N. 2002. “Managing Heritage Attractions: Marketing Challenges at Sensitive Historical


Figure 1. Conceptual framework

(Protagonist-related visitor segment)
Learning/education motivations
(Existing bias against antagonist)

Visits to “Dark Camps of Genocide”
(Antagonist-centric displays)

Catalytic displays  Emotional contagion effects

Strong emotional response
(“negative” emotions directed to antagonist)

Significant post-experience effects
(Amplification of patriotism & bias against antagonist)
Figure 2. Case study outcomes

**Chinese adults [16+]**
- Visit motivations: expanding knowledge, sight-seeing
- Pre-visit attitudes toward Japan, Japanese people & products: negative

- Visits to Lushun Prison Museum, Dalian, China (Japan-negative social representations)
  - Catalytic displays of gallows, body buckets, torture instruments, prisoner cells
  - Widespread emotional contagion effects

- Strong emotional responses (universal)
  - shock
  - sadness
  - hatred
  - anger
  - depression
  - contemplation
  - pity

- Attitudes and intentions
  - more patriotic (universal)
  - more negative
  - perception of Japan → no change
  - perception of Japanese products → no change
  - likelihood to visit Japan → no change
  - friendliness to Japanese → no change

- Respondent characteristics
  - older & Party members
  - students have Japanese friends & know Japanese people

- Japan-negative clusters
  - less positive
  - no change

- Japan-neutral clusters
  - no change
  - no change
Table 1. Characteristics of LPM visitor sample

<table>
<thead>
<tr>
<th>Item</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female %</td>
<td>50.4</td>
</tr>
<tr>
<td>Average age (years)</td>
<td>37.0</td>
</tr>
<tr>
<td>Post-graduate qualification %</td>
<td>56.2</td>
</tr>
<tr>
<td>Bachelors qualification %</td>
<td>16.1</td>
</tr>
<tr>
<td>Fully employed %</td>
<td>52.1</td>
</tr>
<tr>
<td>Students %</td>
<td>21.3</td>
</tr>
<tr>
<td>Monthly income 2,001-4,000 RMB %</td>
<td>31.2</td>
</tr>
<tr>
<td>“ “ &lt;2,000 RMB %</td>
<td>29.1</td>
</tr>
<tr>
<td>Party membership %</td>
<td>27.7</td>
</tr>
<tr>
<td>Item</td>
<td>Result</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td><strong>Main motivation (one response only)</strong></td>
<td></td>
</tr>
<tr>
<td>Expand knowledge %</td>
<td>52.0</td>
</tr>
<tr>
<td>Sight-seeing %</td>
<td>31.3</td>
</tr>
<tr>
<td>Curiosity %</td>
<td>10.0</td>
</tr>
<tr>
<td>School tour %</td>
<td>6.7</td>
</tr>
<tr>
<td>First-time visitors %</td>
<td>79.8</td>
</tr>
<tr>
<td>Visit duration 30-59 minutes %</td>
<td>47.7</td>
</tr>
<tr>
<td>&quot;&quot; &quot; 60-90 &quot;&quot; %</td>
<td>31.2</td>
</tr>
<tr>
<td>Accompanied by family %</td>
<td>61.2</td>
</tr>
<tr>
<td>&quot;&quot; &quot; friends %</td>
<td>19.6</td>
</tr>
<tr>
<td>Have some knowledge of the Second Sino-Japanese War %</td>
<td>63.5</td>
</tr>
<tr>
<td>Have extensive knowledge of the Second Sino-Japanese War %</td>
<td>15.2</td>
</tr>
<tr>
<td>Have some knowledge of LPM</td>
<td>47.5</td>
</tr>
<tr>
<td>Have extensive knowledge of LPM</td>
<td>5.3</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 3. Pre-visit and Post-visit Attitudes and Intentions

<table>
<thead>
<tr>
<th>Item</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-visit general attitudes</strong></td>
<td></td>
</tr>
<tr>
<td>Toward Japan before visiting the museum</td>
<td>1.94(^1) 68.5(^2)</td>
</tr>
<tr>
<td>Toward the Japanese people before visiting the museum</td>
<td>2.23(^1) 55.1(^2)</td>
</tr>
<tr>
<td>Toward buying Japanese products before visiting the museum</td>
<td>2.22(^1) 64.0(^2)</td>
</tr>
<tr>
<td><strong>Post-visit attitudes and intentions</strong></td>
<td></td>
</tr>
<tr>
<td>More negative perception of Japan as a country</td>
<td>4.09(^3) 73.0(^4)</td>
</tr>
<tr>
<td>Purchase less products that are made in Japan</td>
<td>4.04(^3) 71.3(^4)</td>
</tr>
<tr>
<td>More negative opinion about Japanese people in general</td>
<td>3.76(^3) 61.0(^4)</td>
</tr>
<tr>
<td>Less likely to visit Japan as a tourist in the future</td>
<td>3.51(^3) 50.3(^4)</td>
</tr>
<tr>
<td>Less likely to feel friendly toward Japanese tourists visiting China</td>
<td>3.21(^3) 37.9(^4)</td>
</tr>
<tr>
<td>This LPM visit has made me more patriotic toward China</td>
<td>4.67(^3) 92.3(^4)</td>
</tr>
<tr>
<td>Would recommend LPM to others % (multiple responses)</td>
<td>94.3</td>
</tr>
<tr>
<td>To remember China’s humiliation % “yes”</td>
<td>62.8</td>
</tr>
<tr>
<td>To have a patriotic education % “yes”</td>
<td>53.1</td>
</tr>
<tr>
<td>To learn their history % “yes”</td>
<td>36.8</td>
</tr>
<tr>
<td>To be inspired % “yes”</td>
<td>21.5</td>
</tr>
</tbody>
</table>

\(^1\)Mean of 5-point Likert scale, where 5 = very positive, and 1 = very negative; \(^2\)% negative or very negative
\(^3\)Mean of 5-point Likert scale, where 5 = strongly agree, and 1 = strongly disagree; \(^4\)% agree or strongly agree
Table 4. Post-visit attitudes toward Japan and Japanese by cluster\(^1\)

<table>
<thead>
<tr>
<th>Item</th>
<th>1: J-negative unequivocals</th>
<th>2: J-negative visit-conditionals</th>
<th>3: J-negative friendliness-conditionals</th>
<th>4: J-neutral ambivalents</th>
<th>5: J-neutrals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n=230 (21.3%)</td>
<td>n=140 (12.9%)</td>
<td>n=399 (36.9%)</td>
<td>n=265 (24.5%)</td>
<td>n=48 (4.4%)</td>
</tr>
<tr>
<td>More negative perception of Japan as a country</td>
<td>4.89</td>
<td>4.34</td>
<td>4.47</td>
<td>3.09</td>
<td>1.85</td>
</tr>
<tr>
<td>Purchase less products that are made in Japan</td>
<td>4.95</td>
<td>4.46</td>
<td>4.32</td>
<td>3.01</td>
<td>1.79</td>
</tr>
<tr>
<td>More negative opinion about Japanese people in general</td>
<td>4.85</td>
<td>4.30</td>
<td>3.82</td>
<td>2.83</td>
<td>1.46</td>
</tr>
<tr>
<td>Less likely to visit Japan as a tourist in the future</td>
<td>4.82</td>
<td>1.66</td>
<td>3.77</td>
<td>3.13</td>
<td>2.54</td>
</tr>
<tr>
<td>Less likely to feel friendly toward Japanese tourists visiting China</td>
<td>4.47</td>
<td>4.34</td>
<td>2.72</td>
<td>2.55</td>
<td>1.48</td>
</tr>
</tbody>
</table>

\(^1\) 5-point Likert scale; Significance for all statements is p<0.001; coding standardised as negative statements; bolded text indicates that mean for this cluster is statistically higher than all other clusters, while underlined text demarcates a mean that is lower than all the other clusters.
Table 5. Pre-visit general attitudes by cluster\(^1\)

<table>
<thead>
<tr>
<th>Item</th>
<th>1: J-negative unequivocals</th>
<th>2: J-negative visit-conditionals</th>
<th>3: J-negative friendliness-conditionals</th>
<th>4: J-neutral ambivalents</th>
<th>5: J-neutrals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n=230 (21.3%)</td>
<td>n=140 (12.9%)</td>
<td>n=399 (36.9%)</td>
<td>n=265 (24.5%)</td>
<td>n=48 (4.4%)</td>
</tr>
<tr>
<td>Toward Japan</td>
<td>1.53</td>
<td>1.69</td>
<td>1.83</td>
<td>2.45</td>
<td><strong>2.79</strong></td>
</tr>
<tr>
<td>Toward the Japanese people</td>
<td>1.73</td>
<td>1.86</td>
<td>2.23</td>
<td>2.72</td>
<td><strong>3.06</strong></td>
</tr>
<tr>
<td>Toward buying Japanese products</td>
<td><strong>1.60</strong></td>
<td>2.07</td>
<td>2.10</td>
<td>2.80</td>
<td><strong>3.46</strong></td>
</tr>
</tbody>
</table>

\(^1\)5-point Likert scale; Significance for all statements is p<0.001; bolded text indicates that mean for this cluster is statistically higher than all other clusters, while underlined text demarcates a mean that is lower than all the other clusters.
<table>
<thead>
<tr>
<th>Item</th>
<th>1: J-negative unequivocals</th>
<th>2: J-negative visit-conditionals</th>
<th>3: J-negative friendliness-conditionals</th>
<th>4: J-neutral ambivalents</th>
<th>5: J-neutrals</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Hatred (p&lt;.001)</td>
<td>67.0</td>
<td>67.9</td>
<td>57.6</td>
<td>42.6</td>
<td>29.2</td>
</tr>
<tr>
<td>% Anger (p&lt;.001)</td>
<td>66.1</td>
<td>57.9</td>
<td>55.4</td>
<td>41.5</td>
<td>33.3</td>
</tr>
<tr>
<td>% Depression (p&lt;.005)</td>
<td>52.2</td>
<td>37.9</td>
<td>52.9</td>
<td>56.6</td>
<td>62.5</td>
</tr>
<tr>
<td>% Sadness (p&lt;.796)</td>
<td>44.3</td>
<td>49.3</td>
<td>45.6</td>
<td>46.4</td>
<td>39.6</td>
</tr>
<tr>
<td>% Shock (p&lt;.196)</td>
<td>37.0</td>
<td>38.6</td>
<td>35.8</td>
<td>30.2</td>
<td>25.0</td>
</tr>
<tr>
<td>% Contemplation (p&lt;.002)</td>
<td>30.9</td>
<td>27.9</td>
<td>31.1</td>
<td>38.1</td>
<td>56.3</td>
</tr>
<tr>
<td>% Pity (p&lt;.001)</td>
<td>15.2</td>
<td>10.0</td>
<td>18.0</td>
<td>22.3</td>
<td>35.4</td>
</tr>
<tr>
<td>% No feelings (p&lt;.704)</td>
<td>0.9</td>
<td>1.4</td>
<td>2.0</td>
<td>1.9</td>
<td>0.0</td>
</tr>
<tr>
<td>% noticing emotions of other visitors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(X²=11.10, p&lt;.025)</td>
<td>69.6</td>
<td>75.0</td>
<td>76.4</td>
<td>65.3</td>
<td>70.8</td>
</tr>
<tr>
<td>% influenced by others’ emotions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(X²=17.54, p&lt;.002)</td>
<td>73.9</td>
<td>74.3</td>
<td>69.9</td>
<td>62.6</td>
<td>50.0</td>
</tr>
</tbody>
</table>
### Table 7. Other significant cluster characteristics

<table>
<thead>
<tr>
<th></th>
<th>1: J-negative unequivocals</th>
<th>2: J-negative visit-conditional</th>
<th>3: J-negative friendliness-conditionals</th>
<th>4: J-neutral ambivalents</th>
<th>5: J-neutrals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (mean years) (F=17.90, p&lt;.001)</td>
<td>40.5</td>
<td>38.3</td>
<td>38.7</td>
<td>32.1</td>
<td>28.7</td>
</tr>
<tr>
<td>% students (X^2=94.17, p&lt;.001)</td>
<td>15.7</td>
<td>15.7</td>
<td>16.8</td>
<td>30.6</td>
<td>50.0</td>
</tr>
<tr>
<td>% Party member (X^2=10.15, p&lt;.001)</td>
<td>31.7</td>
<td>23.6</td>
<td>31.1</td>
<td>23.0</td>
<td>18.8</td>
</tr>
<tr>
<td>% having Japanese friends (X^2=22.55, p&lt;.001)</td>
<td>8.7</td>
<td>6.4</td>
<td>9.0</td>
<td>14.7</td>
<td>27.1</td>
</tr>
<tr>
<td>% knowing any Japanese (X^2=26.54, p&lt;.001)</td>
<td>13.5</td>
<td>8.6</td>
<td>13.8</td>
<td>20.8</td>
<td>35.4</td>
</tr>
<tr>
<td>Feeling more patriotic as a result of the visit (mean) (F=40.90, p&lt;.001)</td>
<td>4.93</td>
<td>4.71</td>
<td>4.78</td>
<td>4.29</td>
<td>4.54</td>
</tr>
</tbody>
</table>

n=230 (21.3%)  
n=140 (12.9%)  
n=399 (36.9%)  
n=265 (24.5%)  
n=48 (4.4%)