Assessing Cultural Representations of Physician and Patient Imagery in Medical Tourism Websites

Alicia Mason
Pittsburg State University - USA

Kevin B. Wright
Department of Communication, University of Oklahoma - USA

Jessica Bogard
Department of Communication, University of Oklahoma - USA

Abstract
Given recent international trends in globalized healthcare systems, an analysis of the cultural representations of patient and physician imagery was conducted on 66 medical tourism websites. Expectancy violations theory serves as the intercultural theoretical framework for exploring the medical tourism process overall, and quality of care expectations specifically. Results revealed the type of website and international region of care varied both representations of care toward patients and the depictions of physicians as well as their associated environmental surroundings. The data reveals a cause for concern resulting from the distortion and diminishment regarding the ethnicity of physicians who offer services in overseas medical facilities. Future directions are offered to explore the consequences of these images among organizations advancing medical tourism services.

Key words: Expectancy violations, medical tourism, cultural identity, advertising, websites

Experts from Harvard, Johns Hopkins and Mercer agree that we are reaching the outer limit of healthcare affordability. Arnold Milstein, MD, Medical Director of Pacific Business Group on Health (PBGH) diagnosed this emerging healthcare crisis as an unaffordability ebola, in which skyrocketing costs are forcing U.S. citizens to seek medical treatments outside the borders of the U.S. (Bina, 2007). There is little doubt that the enmeshment of healthcare systems, globalization of media systems, and the internet as a research tool has transformed the decision making practices of those in need of medical care. Dutta (2008) acknowledges the ability of the internet "to mobilize multiple stakeholder groups beyond geographical boundaries, [thereby] creating participatory opportunities for "global publics" (p. 250).

Health can be conceptualized as a "negotiated and traded in international markets, where buyers and sellers enter into the negotiation of pricing strategies, invest in resources and develop marketing plans" (Dutta 2008:241). Uwe Reinhardt, a healthcare economist at Princeton University, exclaims "[Medical tourism] has the potential of doing to the U.S. health-care system what the Japanese auto industry did to American carmakers" (Kher 2006:44). With an emerging consensus at the upper-level of healthcare management including stateside facility directors and insurance providers that medical tourism is the wave of the future this investigation seeks to determine the quality of visual imagery associated with the marketing of medical tourism websites to global publics/markets.
The marketers of medical tourists see this as a viable alternative for many reasons. Some are choosing this option for specialized cosmetic procedures, such as fertility treatments, gender reassignments and other elective treatments otherwise not covered within traditional insurance provisions. Other patients arise from countries with nationalized healthcare systems which control access to services. Medical tourists from these regions circumvent long waiting periods associated with nationalized systems. For example, the British National Health System is currently sending patients internationally for the purposes of clearing these backlogs (Horowitz, 2007). In contrast to the exorbitant costs associated with healthcare in the U.S., Milstein and Smith (2006) note a significant amount of patients emerge from "middle-income Americans evading impoverishment by expensive, medically necessary operations" (p.1638). Pachisa (2007) argues medical tourism is attractive to medical patients for several reasons. While the significantly lower expense is the most prominent allure, additional benefits include the lack of wait time, excellent quality, luxurious facilities, access to technology, surgeon expertise, personalized service, longer hospital stays, greater convenience, and travel opportunity.

Medical tourism is "fundamentally different from the traditional model of international medical travel where patients generally journey from less developed nations to major medical centers in highly developed countries for medical treatment that is unavailable in their own communities" (Horowitz 2007:33). Current market trends indicate specific regions with intensive government backing are becoming world renown for their highly-skilled, well-trained physicians, operating in state-of-the-art facilities at comparably low rates. The fusion of these indices is driving U.S. citizens to seek out affordable healthcare alternatives in international settings. Current estimates indicate that 750,000 Americans will go offshore for medical services in 2007, with this number increasing to 6 million in 2010 (Baglia, 2006). Modern technology facilitates an opportunity for the options of international, affordable medical care to reach the tips of the fingers of potential medical tourists who seek out such information via the internet.

**Expectancy Violations Theory**

Burgoon and Walthers (1990) defined expectancy as "an enduring pattern of anticipated behavior that may be either generalized or person-specific" (p. 235). Norms and values are baselines from which an individual benchmarks their own behaviors, as well as their expectations of others. These expectancies evolve from cultural environments and past relational history. Expectancy violations theory (EVT) posits that expectancies exist within a range of acceptability, and once a maximum threshold has been reached an expectancy has been violated. Although EVT approaches the definition of an expectancy violation from a value-neutral standpoint, the term violation commonly connotes a negative perception. It is important to note that violations can be perceived as either positive or negative. A negative expectancy violation is an unfavorable event that is inconsistent with an individual’s preconception of social norms and values, while a positive expectancy violation would be seen as favorable (Mooradian, 2004). In a medical tourism context the capacity for a physician to communicate in English, cleanliness of the facility, responsiveness of staff to patient needs, quality of convalescent care, potential legal recourse, and social support during convalescence are just a few potential opportunities for violations, either positive or negative.

Although expectancy violations theory developed from the field of nonverbal communication it has expanded to embrace cultural implications such as norms and values which are inconsistent pan-culturally. Burgoon (1995) argues that cultural norms and expectancies are easy to break down when one does not have an adequate degree of intercultural competency to adjust. Moreover, Church (1982) found the more ethnocentric and individual is, the more pronounced the feelings of culture shock may be, demonstrated by a lack of coping ability toward adversity within a host culture. Beyond at individuals own ethnocentrism, other preferences and tolerances for ambiguity, individualism-collectivism, context and power, and masculinity and feminity serve cultural reservoirs for potential violations.

The quality of health information presented on the internet is problematic for information quality management (IQM). The quality of information and the representations of care are of interest to health communication researchers and health information seekers. Kyrouz et al., (1998) noted that typically informal advice from family and friends is never the most accurate source of health information. Mittman and Cain (2001) elaborate these concerns by acknowledging the inexpensive nature and the ease of publishing which allows health information providers to gain access to global publics. Given such, it is
difficult to verify who is the source of internet information, the pace or change of information is fluid hindering a reviewed fact checking process, and limited regulation exists to transcend the illusionary international divides of cyberspace.

Opposed to analyzing textual content of medical tourism websites, this study exclusively analyzes the visual associations of medical tourism through medical tourism websites and examines the quality of both physician and patient depictions portrayed through various sources of medical tourism websites by region or locality of service offered. The core premise of framing research relates to the activities of the mass media in selecting, emphasizing and presenting information to mass audiences. The ability of visual information to convey influence has been widely established. This research posits that the representations of culture and identity to global publics through medical tourism websites impacts the perceptions toward both the practitioners and facilities providing the services. These perceptions in turn shape expectations of risk and care. As a result this research seeks to determine how the representations of care of patients, and physician identity are being visually represented through medical tourism websites. Therefore the following is hypothesized:

\( H1: \) The type of medical tourism website (travel, hospital, general advertising, independent agencies) will vary in how medical tourism patients are depicted in that:

a) travel websites will depict medical tourists not under the care or in treatment;

b) hospital websites will depict medical tourists under the care of a physician.

Beyond the visual differences of patient depiction resulting from the type of website promoting medical tourism, it is also hypothesized that the background or surrounding area presented in the imagery would vary according to the type of website in that:

\( H2: \) The type of medical tourism website will vary the surrounding/background area of the images in that:

a. travel companies will depict patients in naturalistic environmental settings such as tropical or exotic environments

b. hospitals will depict patients inside "state of the art" facilities.

The above focuses on illuminating the associations between the type of site and patient depiction and surrounding areas (background) of the images, it is additionally hypothesized that there will be significant relationships between the locality of the services offered and the ethnicity of the physicians depicted. Given that an increasing number of Western-trained physicians are educated in the U.S. while originating from the developing world and have returned to their country of origin to practice medical care. Countries were collapsed and coded into regions: Eastern Asia and the Pacific (EAP), South Asia (SA), Latin American and the Caribbean (LAC), and Europe and Central Asia (ECA) based on the World Health Organization (WHO) classification system.

\( H3: \) There will be symmetry between the ethnicity of the physicians featured in the images in that:

a. websites promoting services in SA & EAP will feature Asian physicians

b. websites promoting services in ECA will feature Caucasian physicians
c. websites promoting services in LAC will feature Latin physicians.

Based upon Paschisa’s (2007) rationale noted above and because of on-going, concentrated efforts in some regions to become premier medical tourism destinations, with state-of-the-art facilities emphasizing surgical expertise and services it is hypothesized the visual imagery will support unity between the concepts in that:

\( H4: \) Medical tourism regions will associate the depictions of physicians
differently in that:

a. websites promoting specialized medical services to EAP and SA region will rely on images of physicians in the "act of" practicing as opposed to,
b. websites promoting elective procedures in the LAC region which will rely on headshots or images of the physician not in care.

Method

This study was part of a larger investigation which systematically analyzed how risk, messages, accreditation, post-operative care and legal recourse are communicated through medical tourism websites (Authors, in press). In contrast, this analysis focused exclusively on the visual images conveyed through websites advancing medical tourism services.

Website Selection

Currently there is no standardized method for sampling content featured on the World Wide Web. Prior to data collection the researchers defined a website as the unit of analysis. For the purposes of the examination the term "website" was defined on a lay level as a collection of pages or files linked together and available on the World Wide Web. Any hyperlinks which would take the researcher from the original website were omitted from consideration. With the absence of standardized protocols, websites were identified in the manner the potential medical tourism patient would begin their quest: by searching for them on Yahoo! (yahoo.com). Yahoo! serves as a search catalog of websites which have been pre-screened by Yahoo! staff. Internet researchers "recommend using a search catalog such as Yahoo! when the research topic is in the early phases and when one is seeking information on a broad topic" (Ribisl, et al., 2003).

At the time of data collection Yahoo! was one of the most visited search sites in the United States. ComScore, Inc., a leader in measuring the digital world, released their monthly analysis of U.S. consumer activity for April 2008. Based on data from the ComScore Media Metrix service, Yahoo! ranked as the second overall internet property receiving approximately 140.6 million visitors, preceded only by Google, for the first time, with 141.0 million visitors.

The Yahoo! search was conducted using the keyword(s) medical tourism, in both the URL and title with .com extensions only, English language only, filtering adult oriented sites, within the U.S. domain which produced 1,000 sites. For randomization purposes every 5th site was selected for analysis. This produced a total of 200 websites for inclusion in the analysis.

The sites were then examined to determine if the advancement of medical tourism services was in fact the main purpose. Excluded from the sampling frame were 134 sites for: (46) non-primary medical tourism sites, (83) non-functional links, (2) regions of non-interest and (3) duplicates. This produced a total of 66 websites included for the analysis.

Image Selection

This study examined images deriving from medical tourism websites. Two coders were instructed to analyze the largest picture on the home page of the website. If flash technology was incorporated coders were instructed to code the first image to appear in the first 5 seconds which fit on the computer screen entirely. The analysis of imagery excluded logos, advertising banners or imagery not meant to supplement the medical tourism information from the source of the site.

A key consideration in visual frame analysis is how the photograph is presented to the audience. Just as the images of newspapers possess photographic dominance meant to attract attention and have a strong impact on readers, coders assessed the dominant characteristics of the main page images solely for two reasons: 1) main page content draws viewers to the subsequent pages and 2) visitors would be exposed to the main page image even if they didn’t visit additional information through linkage (Ribisl, et al., 2003).

Images were coded by the researchers. Coders were instructed to assess the sex, ethnicity, depiction of care for patient and/or physician and surrounding environment. Reliability for these measures was
established by calculating Scott's Pi, which discounts the level of "observed agreement" by the level of "expected agreement" due to chance and is the accepted standard for intercoder reliability for nominal data in communication studies (Potter & Levine-Donnerstein, 1999).

Sex was coded as (male, female, N/A, unknown), reliability was .96. Ethnicity was coded as either (Caucasian/white, African/black, Latin, Asian, other/unknown) reliability was .80. Depictions of patients were coded as being treated, not in treatment, or in a state of post-operative care, reliability was .83. Depictions of physicians were coded similar to patients, as physicians were seen as treating, not treating, or the use of a headshot/other and reliability was established at .89. Finally, the surrounding environment was coded as tropical/exotic, inside a facility, outside a facility, other, and unknown with reliability at .94.

Results

To test the hypothesis that the type website would vary representations of care through patient depictions a Pearson's chi square analysis was conducted. A significant association between the type of website and patient depictions was revealed $\chi^2(9,582) = 109.4$, $p<.001$ (see table 1 for cross tabulations). Results indicate representation of foreign patients in medical tourism websites are predominantly presented as not in care, opposed to being under the care of a physician/hospital staff, or in a state of post-operative recovery. Independent/private agencies incorporated images of patients not under the care of supervision in 51% of the cases and post operative care in 28.4%. Hospital websites follow a similar pattern by presenting patients not in care in 50% of the cases and 25% for each post-operative and in care states. From this sample travel websites advancing medical tourism services did not show any representations of foreign medical tourists post-operatively, but rather emphasized patients not in care in 75% of the cases.

Table 1:

Crosstabulations for Representations of Patient Care Across Types

<table>
<thead>
<tr>
<th>Patient Depictions</th>
<th>Not In Care</th>
<th>In Care</th>
<th>Post-Op/Recovery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Types:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ind/Private</td>
<td>137 (147.7)</td>
<td>55 (59.2)</td>
<td>76 (61.1)</td>
</tr>
<tr>
<td>Hospitals</td>
<td>36 (39.7)</td>
<td>18 (15.9)</td>
<td>18 (16.4)</td>
</tr>
<tr>
<td>Travel</td>
<td>54 (39.7)</td>
<td>18 (15.9)</td>
<td>0 (16.4)</td>
</tr>
</tbody>
</table>

Note: Expected frequencies appear in parentheses below observed frequencies.

It was also hypothesized that the type of site would vary different aspects of the surrounding area in that travel website advancing medical tourism services and focus more on the allure of the landscape of the region of services, compared to hospital websites promoting medical tourism which would want to emphasize the "state of the art facilities" which attracts medical clients to overseas clinics. A Pearson’s Chi Square revealed a significant difference $\chi^2 = (12, 582) = 126.08$, $p< .001$, and results support the hypotheses (see table 2 for crossstabulations). As expected hospitals rely on providing visual images of the state of the art facilities in which they are based. Surprisingly, 59.3% of travel websites also
incorporated this imagery into their sites, followed shortly by exotic and tropical locations 40.7% of the
time. General advertising sites used the tropical and exotic nature of medical tourism locations 100% of
the time while independent medical tourism websites reflected the most diverse representations with a
strong emphasis on inside the facility (52.9%), tropical/exotic (27.9%), and unknown (9.7%), outside
facility (5.0%) and other (12.4%).

Table 2:

Crossstabulations for Representations of Surrounding Areas Across Types

Surrounding Areas

<table>
<thead>
<tr>
<th>Types:</th>
<th>Gen/Adv</th>
<th>Ind/Private</th>
<th>Hospital</th>
<th>Travel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tropical/Exotic</td>
<td>18</td>
<td>112</td>
<td>0</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>(5.2)</td>
<td>(115.1)</td>
<td>(20.7)</td>
<td>(26.1)</td>
</tr>
<tr>
<td>Inside Facility</td>
<td>0</td>
<td>212</td>
<td>72</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>(10.5)</td>
<td>(232.9)</td>
<td>(41.8)</td>
<td>(52.8)</td>
</tr>
<tr>
<td>Outside Facility</td>
<td>0</td>
<td>20</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>(.6)</td>
<td>(13.8)</td>
<td>(2.5)</td>
<td>(3.1)</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>18</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>(.6)</td>
<td>(12.4)</td>
<td>(2.2)</td>
<td>(2.8)</td>
</tr>
<tr>
<td>Unknown</td>
<td>0</td>
<td>39</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>(1.2)</td>
<td>(26.9)</td>
<td>(4.8)</td>
<td>(6.1)</td>
</tr>
</tbody>
</table>

Note: Expected frequencies appear in parentheses below observed frequencies.

Beyond the differences which emerged based on the type of website, to test the additional hypotheses
chi-squares were again performed to analyze the associations which derived from locality on both the
ethnicity of the physicians ($\chi^2=(12,503)=162.7$, $p<.001$), and the physicians’ depiction of care
($\chi^2(4,320)=110.2$, $p<.001$). As hypothesized, noticeable differences in the depiction of physicians are
associated with specific regions. It was originally hypothesized that areas such as the Eastern Asia and
Pacific, which are quickly becoming a cornerstone of the international medical tourism infrastructure
resulting from the development of state-of-the-art facilities and physician expertise, would be more likely
to show these physicians in the "act of" practicing. It was additionally hypothesized that regions, which
have been recognized for elective procedures for Western medical tourists for sometime such as Latin
America and the Caribbean, would rely on headshots or imagery of doctors not in the "act of" practicing.
(Refer to crosstabulation tables 3 & 4).

Table 3:

Crossstabulations for Representations of Physicians Across Regions

Region of Service

<table>
<thead>
<tr>
<th></th>
<th>EAP</th>
<th>LAC</th>
<th>ECA</th>
</tr>
</thead>
</table>


Results indicated the Eastern Asia and Pacific region incorporated a majority of the imagery associated with physicians as "in care" or treating a patient (84.4%) opposed to Latin America and the Caribbean with only 15.6% of the sample. An unexpected finding was the incorporation of headshots or other physician imagery within the websites promoting medical tourism to Europe and Central Asia. In no instances are physicians/surgeons shown in care/surgery; instead the ECA region relied on headshots (50%) or imagery of the physicians not in care (50%).

Chi-square and cross tabulations also revealed significant differences in the ethnicity of the physicians in the website imagery. Results did not support the hypothesis that there is symmetry between the ethnicity of the physician and the location of services offered. Instead, Europe and Central Asia, as well as Latin America and Caribbean both incorporate images of physicians with Caucasian ethnicity within the websites. The Eastern Asia and Pacific region is diversified in that it accounts for 75.9% of the images of Asian doctors but this constitutes only 38.9% of the portrayals of physicians within the region, with the presentation of Caucasian doctors (44.4%) dominating websites advancing medical tourism services to the region, and Latino, African/black as well as other/unknown physician imagery each accounting for 5.6% independently. Although both ECA and EAP incorporate depictions of Caucasian physicians throughout medical tourism sites, it is sites originating from south Asia (SA) which demonstrate the most symmetry with a majority (50%) of their physicians as Asian, followed by Caucasian and African each (25%).

Table 4:

<table>
<thead>
<tr>
<th>Crosstabulations for Ethnicity of Physicians Across Regions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regions</td>
</tr>
<tr>
<td>------------------------------------------------------------</td>
</tr>
<tr>
<td>Ethnicity:</td>
</tr>
<tr>
<td>Caucasian/White</td>
</tr>
<tr>
<td>144 (169.4)</td>
</tr>
<tr>
<td>57 (29.8)</td>
</tr>
<tr>
<td>20 (41.8)</td>
</tr>
<tr>
<td>42 (22)</td>
</tr>
<tr>
<td>African/Black</td>
</tr>
<tr>
<td>18 (24.5)</td>
</tr>
<tr>
<td>0 (4.3)</td>
</tr>
<tr>
<td>20 (6.0)</td>
</tr>
<tr>
<td>0 (3.2)</td>
</tr>
<tr>
<td>Asian</td>
</tr>
<tr>
<td>126 (106.9)</td>
</tr>
<tr>
<td>0 (18.8)</td>
</tr>
<tr>
<td>40 (26.4)</td>
</tr>
<tr>
<td>0 (13.9)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Note: Expected frequencies appear in parentheses below observed frequencies.

Discussion

The results of the analysis for the most part supported the hypotheses. There were significant differences of patient depictions based on the type of site. Travel companies advancing medical tourism services displayed patients not in care in a majority of the cases while hospitals were more likely to incorporate patient imagery as one which was in-care or in a post-operative care state. To further understand the representations of patients, the background of the images revealed a similar pattern in that hospitals were more likely to incorporate images highlighting their facilities and operating rooms in contrast to general advertising agencies which relied on the tropical and exotic nature of the location of services for appeal. Interestingly, travel agencies marketing medical tourism were slightly more inclined to associate the patients not in-care with the hospitals/facilities as opposed to situating the patients in a background of tropical environment.

Perhaps the most revealing finding was the lack of symmetry between the representation of physicians’ ethnicity and region of services offered. The use of Caucasian/white physician imagery may be a mere relational tool used for purposes of identification. McQuail (1972) elaborated on the tendency of the media to personalize complicated issues and topics in a manner which makes them either more understandable or more attractive to audiences. The visual imagery associated within these sites is clearly generating a perceived level of similarity between foreign patients and foreign doctors. Therefore one must ask what the latent consequences are for using such contradictory ethnic physician images. Medical tourism is an intercultural experience, medical tourism patients are operated and cared for by foreign doctors, nurses and staff whom most, but not all, which have been trained in English. However the expectancy violations potentially resulting from this initial web exposure may create distorted perceptions of the healthcare services being advanced. Beyond language barriers, cultural differences are a part of the medical tourism process, specifically within the physician-patient dyad. These results indicate cultural differences are being diminished and in some cases blatantly distorted. As a result, websites which may be establishing the expectancy threshold and impacting the decision criteria of potential medical tourists could contribute to future, potential negative expectancy violations.

Limitations and Future Directions

A considerable limitation is the depth of this analysis. The concepts of emotion and tone were omitted from these visual considerations. Although results supported the hypothesis that travel websites promoting medical tourism would not depict patients in care or in post operative recovery, further analysis may reveal additional trends in representations of medical tourists within these websites. Moreover, this analysis focused on front page imagery only. Perhaps there are additional associations which emerge between the imagery of patients and physicians associated within common web page sections such as the about us, frequently asked questions and/or general information pages. Furthermore a medical tourist’s degree of communication competency and ethnocentrism may magnify these intercultural threats to preconceived expectancies.

To ensure the highest level of quality information, future investigations can advance understanding from a top-down or a bottom-up approach. First, survey research can begin assessing the subjective evaluations of medical tourism websites by the professionals and staff working within medical tourism facilities and guide the integration and incorporation of the ethics, practices, and values from facility and clinic operators into the marketplace. Second, perhaps future mental models research can begin assessing the dialog of medical tourism chat rooms compared with the testimonials of patients, which are integrated into the websites, can provide insight into the intercultural expectations pre- and post-
operatively. And finally, organizational psychology can begin investigating the intercultural principles guiding the decision criteria and responsiveness of intra-organizational medical tourism providers specifically related to the quality of care outcomes expected by medical tourists.

As mentioned prior, this is a supplemental visual analysis of an exploratory investigation into recent market trends in the U.S. healthcare system resulting from international globalized healthcare trends. The consequences of using identification techniques to diminish cultural variations among "global publics" remains unknown. Edelheit (2007) notes, "Before spending thousands of marketing dollars to attract the insurance carriers and fully insured patients, international hospitals should focus on globalizing their data to allow for full disclosure of quality of care and outcome data" (p.43). The parent study does not provide supporting evidence as to the full disclosure Edelheit refers to, however this analysis provides evidence for possible distortion through the imagery of physician ethnicity. This is a matter of concern for both health information providers and health information seekers in the medical tourism context.

Although steps are being made to overcome the intercultural divide within medical tourism encounters, i.e., telemedicine, video interpreters, and portable electronic health records, social science needs to continue exploring the role of such technological infrastructures. These systems may advance intercultural cohesion for stakeholders involved in the medical tourism process, or create a vacuum for the intercultural expectancy breakdown Burgoon (1995) once foreshadowed.

References


**About the Authors**

**Alicia M. Mason** is an Assistant Professor in the Department of Communication at Pittsburg State University. Her research focuses on Risk and Crisis Communication in the health domain. She has several published articles and 14 national and international conference presentations.

**Kevin B. Wright** is a Professor of Health Communication in the Department of Communication at the University of Oklahoma. His research focuses on interpersonal communication, social support and health outcomes, and computer-mediated relationships. He is the coauthor of three books, including Health Communication in the 21st Century, Applied Health Communication, and Lifespan Communication, and his work has appeared in over 45 book chapters and journal articles.

**Jessica Bogard** was a doctoral student in the Department of Communication at the University of Oklahoma when the analysis was conducted.

**Authors’ Address**

Pittsburg State University  
Department of Communication  
213 Grubbs Hall  
1701 S. Broadway St  
Pittsburg, KS 66762

---

URL: http://www.immi.se/intercultural/.