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Communicative Ecology of Sojourners from Pakistan and its Implications for Public Service Campaigns

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Abstract

Communicative ecology of Hajj-pilgrims from Pakistan is examined in a probability sampling. Of the eleven communication contacts identified, contacting friends and co-pilgrims tops the list followed by community organizational sources of information counters, tour operators, and Hajj mission officials. Ethnic newspaper and the mainstream Saudi mass media rank third and fourth. Less than 10% of the responses respectively cited digital billboards & Internet. Community organizations, co-pilgrims, the ethnic newspaper, and the digital screens impacted upon satisfaction. Findings highlight implications for public service campaigns to pilgrims.

Keywords: Communication ecology; PSA campaigns; Hajj-pilgrims

1. Significance and rationale of the study

Most of the available communication research on the communication behavior of the Hajj pilgrims suffers from two deficiencies. Firstly, and in line with the standard positivistic methodology, communication behaviors are tapped through the researcher-defined close-ended questions. Secondly, the communication channels used are examined unrealistically in isolation from one another and not within the context of all available channels.

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Advancing the discussions on the issue, we assume that the pilgrims in problem situations operate in the context of the best available communication choices or channels. That is, the use of a particular communication channel by the pilgrim-sojourners should be looked at within the context of all the other available communication channels and not in isolation from one another. The broad research question the study, therefore, seeks to answer is: of the communication resources available to them, what communication connections do the pilgrim-sojourners make in problem situations during their stay for the pilgrimage in the host country setting? That is, the study aims to map the sojourners' communicative ecologies. Additionally, if the pilgrims' communication-contacts in problem situation help alleviate their problems then a relevant query has to be about the impact the pilgrims' communication-contacts may have on their satisfaction with services. Such a query will not only manifest the actual utility of the pilgrims communication contacts in problem situations but may highlight the importance of these channels for public service campaigns to facilitate the pilgrims.

We believe, generating such information may be a significant prerequisite for taking a scientific approach to developing a pilgrims' reach strategy. Additionally, it may also help guide the efforts of researchers, communication practitioners, and the campaign planners that seek to effectively communicate with the diverse communities of Hajj sojourners. The assumption is that an optimum reach strategy, apart from the specific message content, has to exploit and engage the entire gamut of the pilgrims' communicative ecology that acts as a conduit for the campaign messages. We believe, generating such information may be a significant prerequisite for taking a scientific approach to developing a pilgrims' reach strategy. Additionally, it may also help guide the efforts of researchers, communication practitioners, and the campaign planners that seek to effectively communicate with the diverse communities of Hajj sojourners. The assumption is that an optimum reach strategy, apart from the specific message content, has to exploit and engage the entire gamut of the pilgrims' communicative ecology that acts as a conduit for the campaign messages.

2. Communication ecology: what is it and why does it matter?

Marshall McLuhan (1964; 2005) coined the term "media ecology" highlighting the need for mass communication research to consider audience members' media connections in *context* of each other. The term communication ecology expands McLuhan's original idea to include individuals' interpersonal and organizational communication connections as well. Comprehensive conceptualization of communication ecology is found in Katz, Ang and Suro (2010), Matsaganis, Katz, and Ball-Rokeach (2010), Wilkin, Ball-Rokeach, Matsaganis, and Cheong (2007), and in Wilkin and Ball-Rokeach (2010). The substance of the conceptualization in these studies boils down to the following: that communication ecology refers to systems of interpersonal, mediated, and organizational communication options that individuals can connect with in order to achieve everyday life goals, and that people act after considering their communication channels in context of each other and they usually connect to more than one communication option for a particular type of goal, and that individuals' communication ecologies are goal-type specific. That is, the manifested communication ecologies will be different when the goal is to understand events in one's community from the ecologies, for example, of the play goals – goals to figure out what to do for relaxation and entertainment (Ball-Rokeach, 1998).

The most important potential benefit of taking an ecological approach from the present study's standpoint nevertheless is that this approach shall help us identify the most important communication channels for building a communication campaign, for maximizing its effectiveness in capturing attention, and for increasing its effect potential.

3. Objectives of the study

Given the foregoing, the main objectives of the study are:

- To statistically describe the pilgrim-sojourners' most important communication connections/behaviors for everyday needs.
- To determine the degree to which the pilgrims' communication connections impact upon their level of perceived satisfaction with the services provided to them.

4. Methods

A total of 439 interviews were completed from a sample of Pakistani pilgrims selected through a combination of stratified-systematic and simple random sampling procedures. Buildings were stratified on the Hajj scheme of the occupants and the size of the buildings determined on the basis of the number of pilgrims housed in a building. A total of twenty buildings were systematically selected from the strata.

Problem related communication ecology of the pilgrims is conceptually referred to the pilgrims' actual or potential use of all the various communication channels *available* to them in problem situation. Thus a pilgrim may use more than one channel in a situation. Additionally, it also implies that some communication channels might be more useful and/or convenient than others. Thus a pilgrim's communication ecology implies a perceived rank order of the channels in terms of their usage and utility. Operationally, the pilgrims' problems'- related communication ecology was tapped through two open-ended items   like: "Thinking about all of the different ways of communicating and getting information or practical help about problems during your stay in the Kingdom - like using TV, radio, newspapers, pamphlets, books, magazines, the Internet, talking with the Mualam or his agents, tour operators, going to information counters, friends, talking to family, friends, and co-pilgrims, government officials, and dars organizers in the neighborhood masjid -- pl. name two most important channels that you used or would like to use to get information when faced with problematic situations? This open-ended query was followed by a fixed-response, 3-point scale ranging from 1 "never" to 3 "often": How often do you use each one of the following sources? The sources ranged from Saudi mass media, digital screens, Internet sources/YouTube and local language media to co-pilgrims, tour operators, information counters, Hajj officials, & dars organizers in the neighborhood mosques. Whereas, contact with interpersonal and media sources were all single item measures, the communication contact with community organization was the mean score of a 5-item additive index comprising the pilgrim's contacts with the mualam or his agent, the tour operator, the sector-incharge of the Hajj-mission, the information counters, and the dars-organizers in the neighborhood mosques. Additionally, information on demographic variables of age, education, and the Hajj scheme (Hajj through the government scheme or the private tour operators) was also collected. Satisfaction with the services provided by service agencies conceptually was the extent of the pilgrims' perceived satisfaction with the services of various agencies. Operationally, perceived satisfaction was indexed by a 5-point Likert-type item (1 very dissatisfied with the service to 5 very satisfied) capturing the pilgrims' degree of satisfaction with each of the service provider. Two satisfaction indices were used as criteria; viz, satisfaction with Saudi services & satisfaction with Pakistani services.

5. Data analysis and results

Data were analyzed through descriptive statistics like univariate frequency distributions through multiple response analysis, measures of central tendency and dispersion, and stepwise multiple regression. For stepwise multiple regression the satisfaction criteria were regressed on three demographic and six communication contact predictors. The four mediated communication contact variables of i) the extent of contact with the Saudi national media, ii) the extent of contact with the digital screens/billboards, iii) the extent of contact with the Internet, and iv) the extent of contact with the ethnic newspapers (the local Urdu language newspaper) -- all originally 3-point scales (ranging from 1=never to 3=often) – were transformed apiece into a two-point scale (1=never contacts; 2=contacts the source) for distributional reasons through collapsing the sometime contacts and often contacts categories. The other two communication contact variables were the extent of contact with family, friends and co-pilgrims [a 3-point scale (Mean=2.79; SD=.79)], and the extent of communication contact with community organizations [a 5-item mean additive index as mentioned above (Mean=1.39; SD.30). Additionally, collinearity diagnostics, the Durbin-Watson statistics, the residual analysis, and the influence statistics were all looked at to assess the accuracy and the generalizability of the regression model used.

Tables 1 and 2 together provide data on the first objective. These tables tap two aspects of the pilgrims' communication ecology; viz, i) a rank order of the top two sources of communication contact (Table 1), ii) and the intensity of their contacts with each source in their ecology (Table 2). In all, 11 types of communication sources showed up. The sources included the mainstream and the community mass media, the Internet, and the digital billboards, the micro-individual sources of contacting co-pilgrims, friends and family members, and such community organizational sources like the information counters, dars organizers in the neighborhood masjid, the

host government officials, and the Pakistan Hajj mission officials. Table 1 rank orders top two sources of communication contacts. Micro-individual source of contacts with family/friends and co-pilgrims figures at the top, the community organizational sources of contacting the information counters, the tour operators, and the Pakistan Hajj ministry officials respectively occupy the second and the fifth positions, whereas the mediated sources of ethnic newspapers, the Saudi mass media, and the Internet/YouTube occupy respectively the third, the fourth, and the sixth positions.

Table 2 reports the extent of contact with each of the communication source. Extent of contact with family/friends and co-pilgrims (Mean= 2.39, SD= .79) is not only identified by most pilgrims as the most important source of contact (cf. Table 1), it is also used most often (Table 2). Contact with the tour operator/his agent (Mean= 2.10, SD =.82) is a source with the second most extensively used source. The same source is ranked fifth in the top two most important sources of contact for the pilgrims (cf. Table 1). The hotels/housing information counters category of communication contact that ranks second in the most important sources of communication contact (cf. Table 1) appears as the third most used source as well in Table 2 (Mean = 2.06, SD=.79). The third and the fourth ranked most important sources of communication contact (cf. Table 1); viz, the ethnic newspaper (Mean=1.73, SD=.86; and the Saudi national media (Mean=1.72, SD=.78), respectively rank as the fourth and the fifth most used category of contacts. The least used communication sources for the Pakistani pilgrims (cf. Table 2), respectively comprise contacts with the Internet (Mean=1.25, SD=.59), the digital screens (Mean=1.24, SD=.49), the Pakistani Hajj officials (Mean=1.23, SD=49), the dars organizers in the neighborhood mosques (Mean=1.21, SD=.49), the mualams/agents (Mean=1.17, SD= .43), and the Saudi officials (Mean=1.02, SD =.19).

Table 3 reports stepwise multiple regressions of the two criterion indices on three demographic and six communication contacts variables. The 3-point scales of the four predictors of contacts with mediated sources; viz, the Saudi mass media, the ethnic or the Urdu language newspapers, the Internet/YouTube, and the digital screens were all dichotomized at the median into two groups (those who never contacted the source and those who contacted the source). This collapsing was done due to evidence of very strong positive skew and for other distributional reasons necessitating a logical collapsing of the categories (cf. Table 2). As evident from the table, after controlling for the effects of other predictors, we found statistically significant effects of communication contacts with the community organizations, the family/friends & co-pilgrims, the ethnic media (the Urdu language newspaper), and the digital screens on satisfaction with the services provided by the Saudi government and the Hajj authorities. The direction of impact of these four communication contact predictors is interesting. Whereas the increased communication contacts with community organizations and co-pilgrims leads to greater feeling of satisfaction with the Saudi government services, the communication contacts with the ethnic media (the Urdu newspaper here) and the digital screens led to decreased satisfaction with the quality of services provided. In the case of satisfaction with the Pakistani government services, only two predictors; viz, communication contacts with community organizations and contacts with the Urdu language newspaper produced statistically significant effect.

Table 1. Pilgrims' most important sources of communication contacts in problem situations in the Hajj of 1433 (H): A rank order of frequencies.

Sr. No.	Communication Sources	Responses (N=715)		Cases (N=391)
		N	%	%
1.	Co-pilgrims	124	17.3	31.7
2.	Hotel/Housing Info. Counters	120	16.8	30.7
3.	Urdu-language (Ethnic) Media	101	14.0	25.8
4.	Saudi Mass Media	88	12.3	22.5
5a.	Tour Operator/His Agent	80	11.4	20.5
5b.	Pakistan Hajj Ministry Officials	80	11.4	20.5
6	Internet/YouTube	33	4.6	8.4
7.	Dars Organizer in Neighborhood Masjid	31	4.3	7.9
8.	Digital Screens/EBBs	26	3.6	6.6
9.	Saudi Hajj Officials	17	2.3	4.4
10	Mualam/His Agents	16	2.2	4.1

Table 2. Frequencies, means, and standard deviations of communication contacts of pilgrim-sojourners: The extent of use

Variables Contacting …	Frequencies (%)			Means	S.D.	Ns
	1 Never	2 Sometime	3 Often			
1. Co-pilgrims	19.4	21.9	58.8	2.39	.79	434
2. Reception/info. Counter	28.2	37.0	34.7	2.06	.79	432
3. Available Urdu Language Media	53.3	19.7	26.8	1.73	.86	422
4. Saudi National Media	48.5	31.4	20.1	1.72	.78	433
5. Tour Operator/Agent	67.8	16.2	16	1.48	.76	401
6. Sector In-charge	73.5	19.2	7.3	1.34	.61	427
7. Internet/YouTube	79.9	14.8	5.3	1.25	.54	433
8. Digital Screens	78.8	18.4	2.8	1.24	.49	454
9. Pakistan Hajj Mission Officials	79.8	17.2	3.0	1.23	.49	430
10. Dars Organizers	82.8	13.8	3.5	1.21	.49	429
11. Mualam or Agent	85.2	12.8	2.1	1.17	.43	431
12. Saudi Security Officials	91.9	6.2	1.8	1.10	.36	433
13. Saudi Hajj Ministry Officials	98.6	7.0	7.0	1.02	.19	432

Table 3. Stepwise multiple regression of the pilgrims' satisfaction variables on demographic and communication contact variables

Predictors	Final Step Betas[*]	
	Satisfaction with Saudi Services (N=285)	Satisfaction with Pakistani Services (N=288)
Constant[**]	2.4	2.6
Age		
Education		
Hajj Scheme		
Contacts community org.	.27	.28
Contacts co-pilgrims	.17	
Contacts ethnic media	-.23	-.20
Contacts Internet		
Contacts digital screens	-.15	
Contacts Saudi media		
R^2%	11.6	6.4
Adjusted R^2%	10.3	5.8

[*]*Coefficients are significant at p< .01*
[**]*Figures for the constant are unstandardized partial regression coefficients.*

6. Discussion and implications for an outreach campaign to the pilgrims

Top five ranks of the two most important sources of communication contacts (comprising over 82% of the responses) respectively belonged to contacts with co-pilgrims/friends (a micro-individual source), the housing reception/information counters (a meso-level community organization source), the Urdu-language newspaper (an ethnic media source), the Saudi mainstream mass media (a macro-level societal source), the contacts with tour operators (a meso-level community organization source) tied with the communication contacts with the Pakistan Hajj mission officials (a meso-level community organization source). In terms of the intensity of the contacts, the rank order of the sources respectively was: family/friends & co-pilgrims, the tour operators, the information counters, the Urdu language newspaper, and the Saudi national media. Clearly, the interpersonal contacts with micro-individual and the community organizational sources were predominant and more intense than the mass mediated sources in the communication ecology.

Contacts with community organization and co-pilgrims had a positive effect on the level of satisfaction with the Saudi services after the effects of the rest of the eight predictors (age, education, the Hajj scheme, the contacts with the co-pilgrims, the contacts with the Internet, the Urdu language newspaper, the digital screens, and the Saudi

national mass media) were accounted for. The contacts with the Urdu language newspapers and the digital screens, however, impacted negatively on the pilgrims' levels of satisfaction.

The study did not examine as to why the digital screens and the Urdu language newspapers were producing negative impact on the satisfaction levels. One may speculate that it may be due to the nature of the contents in the two mediated channels. Nevertheless, the possibility of the contents critical of the government services on the digital billboards (largely a public service announcement tool) is out of question. Similarly, in the absence of any content analysis of the Urdu language local newspaper, any inference about the Hajj coverage being negative might be largely out of place. It may well be likely that the coverage in the newspaper was unhelpful to the pilgrims in resolving their immediate problems. And this frustration with the newspaper might be undermining their satisfaction with the overall services being provided. But, of course, an examination into the nature and the relevance of the content would be needed before any conclusion can be drawn. Our previous study about the uses and the effects of the digital billboards has shown that the Pakistani pilgrims failed to benefit from the billboard messages despite using the screens due to the language barriers and such message display factors like the crowded text, the scrolling speed of the text, the type-size of the text, and the irrelevance of the text to the practical needs of the pilgrims. Hence the resultant dissatisfaction of the pilgrims with the practical utility of the billboards screens in catering to their everyday problem-solving needs might also be getting projected on to their level of satisfaction with the services provided.

Implications of the pilgrims' communication contacts for PSA campaigns are suggestible from three pieces of evidence in the study: the importance of the contact for the pilgrims in problem situations; the extent of usage of the channel in problem situations; the impact of the channel on their satisfaction with services. Three types of communication contacts are involved here: contact with organizational or community resources, the interpersonal contacts with co-pilgrims, contacts with mediated sources (traditional mass media, digital billboards, and the online media). For communication with the pilgrim-sojourners and for the diffusion of relevant and practical information to them, the findings imply that for a successful campaign greater reliance will need to be placed on interpersonal contacts with co-pilgrims. This resource is perceived as most important in problem situations, is used extensively, and it positively impacts upon satisfaction with the services provided by the host country. A PSA campaign will need to stimulate, stoke and fillip this resource with PSA messages. To activate and integrate this particular resource with the campaign messages, the study suggests that such community organizational tools will need to be deployed like for example the information counters that are perceived as most important and used often by the pilgrims (Tables 1 & 2). Ethnic newspapers, digital screens, & Saudi mass media can also be used in this two-step role as these are perceived as important but on the average used sometime. Most of the community organizational sources, jumbled in an index in the stepwise regressions, might be generally impactful but on the average are used sometime. Specifically, apart from the information counters (perceived as most important, used often), such other community organizational resources like neighborhood dars sessions, security officials, the Hajj mission officials, the tour operator/agents, the Mualam/agent might contribute to positive impact on satisfaction but are used sparingly and are relatively perceived less important as well. Nevertheless these can also be used for campaign purposes provided their availability and visibility is greatly increased.

Use of ethnic media (e.g., the Urdu language newspapers) and the digital screens is further constrained because of their negative impact on satisfaction levels of the pilgrims. The negative impact in the case of these two mediated resources could be largely due to the content being either irrelevant to the pilgrims needs or its structure or package might be questionable. The pilgrims seem to be turning to these two sources for help but are probably returning largely dissatisfied due to unhelpfulness of the content. Hence these two resources can be gainfully utilized in campaigns provided the substance and the packaging of the content is carefully harnessed and monitored to engage the attention and the needs of the target audience. The Saudi mainstream media might not be a channel of choice in reaching out to Pakistani pilgrims despite being considered as important and used extensively it is producing no impact at all. Again an analysis of the mainstream media content is in order before anything definitively can be said in that regard.

7. Conclusion

The findings seem to imply that for a successful PSA campaign to the pilgrim-sojourners greater reliance will need to be placed on interpersonal contacts with co-pilgrims. This resource is perceived as most important in problem situations, is used extensively, and it positively impacts upon satisfaction with the services provided by the host country. Particularly, prior to launching a PSA campaign charting out pilgrim-sojourners' problem-based communicative ecology may be a useful imperative for the effectiveness of the campaign. The study suggests that such community organizational tools will need to be deployed like information counters within the housing enclaves. Ethnic newspapers, digital screens, & Saudi mass media though used less often are yet perceived important. In sum, knowing problem-based communicative ecology of the target population should be tapped by way of pre-campaign formative research.

References

Ball-Rokeach, S. (1998). A theory of media power and a theory of media use: Different stories, questions, and ways of thinking. *Mass Communication and Society, 1*, 5-40.

Katz, V., Ang, A., & Suro, R. (2010, August). *An ecological approach toward understanding U.S. Latinos' heal communication behaviors, access, and outcoes.* Retrieved January 2012, from allacademic.com: http://www.allacademic.com/meta

Matsaganis, M., Katz, V., & Ball-Rokeach, S. (2010). *Understanding ethnic media: Their social and cultural roles in economic and political context.* Thousand Oaks, CA: Sage Publications.

McLuhan, M. (1964). *Understanding media: The extension of man.* New York: Mentor Books.

McLuhan, M. (2005). *Understanding media: Lectures and interviews.* ((. S. Staines), Ed.) Boston, MA: MIT Press.

Wilkin, H., & Ball-Rokeach, S. (2010, June 22). *Hard-to-reach? Using health access status as a way to more effectively target segments of the Hispanic audience*. Retrieved January 01, 2012, from allacademic.com: http://www.allacademic.com/meta/p402789_index.html

Wilkin, H. A., Ball-Rokeach, S., Matsaganis, M. D., & Cheong, P. (2007). Comparing communication connections of geo-ethnic communities: How people stay on top of their communities. *Ecloctronic Journal of Communication, 17*(1,2).