The Northwest Journal of Communication

Volume 41 Issue 1 ✳ Spring 2013

EDITOR
Heather Crandall
Gonzaga University

EDITORIAL AND DESIGN
Concord Editorial and Design
www.concordeditorial.com

PRINTING
Cushing-Malloy
www.cushing-malloy.com

Published by the Northwest Communication Association
www.northwestcomm.org

ISSN 1559–0003

Special thanks to Laura Snyder, Graduate Assistant in the MA program in Communication and Leadership Studies at Gonzaga University, for her valuable contribution to this issue.

Submission Guidelines

The Journal

The Northwest Journal of Communication is a scholarly, peer reviewed publication dedicated to understanding human and mass communication in all forms. The journal is indexed by Ebscohost. We encourage contributions related to any area of communication from all theoretical and methodological perspectives. Articles relating to any aspect of communication are welcome, as are all theoretical and methodological approaches. Manuscripts will be considered as they are received, and all submissions undergo rigorous peer review. Acceptance rates range, depending on the issue, from 15–25 percent.

Submitting to the Journal

Manuscripts are accepted on a rolling basis, and may be submitted electronically at any time. Manuscripts should conform to the *Publication Manual of the American Psychological Association* (APA). Manuscripts should not exceed 8,000 words including references (although exceptions may be made at the editor's discretion) and should not have been published in any prior form. The journal follows a policy of blind review; authors should avoid any identification in the body of the manuscript or abstract.

Manuscripts should be submitted electronically to Heather Crandall at Gonzaga University (crandallm@gonzaga.edu). Authors should submit:

1. A letter to the editor with the title and full names of author(s), affiliation, contact information, email, and telephone number sent in the body of an email to crandallm@gonzaga.edu.
2. The complete manuscript with 5–7 key words, references, tables and figures in a word document without author information.
3. A 75–150 word abstract in a word document without author information.

Table of Contents

A Dialectic Approach to Work–Family Conflict

CHRISTINA G. YOSHIMURA
University of Montana

Managing work–family conflict is an ongoing challenge in which individuals have difficulty allocating their time, skills, or behaviors to fully meet responsibilities at both work and home. Examining communicative responses to work–family conflict allows a focus on how people cope with this conflict and how differential communicative responses are related to marital quality. In this study, work–family conflict is situated as a dialectic tension. One hundred fifty-four respondents reported on changes in work–family conflict throughout their marriages and their use of different responses to dialectic tensions (denial, disorientation, segmentation, cyclic alternation, balance, integration, recalibration, and reaffirmation) to manage the conflict. A significant relationship between denial–disorientation response and both marital quality and level of work–family conflict emerged, as did a relationship between recalibration–reaffirmation responses and the mean level of work–family conflict.

KEYWORDS: Work, family, marriage, conflict, dialectics

Before the more encompassing term *work–life* (e.g., Cowan & Hoffman, 2007; Golden, 2009; Trethewey, Tracy, & Alberts, 2006) took hold to discuss the conflict between organizational and personal responsibilities, many discussed it as a *work–family* issue (e.g., Raabe & Gessner, 1998; Sandberg, 1999; Stebbins, 2001). While the broader term *work–life* is useful for framing the conflict between one's paid obligations and one's discretionary time and interests, a specific focus on *family* still warrants some attention, given the

Christina G. Yoshimura, Ph.D., is an associate professor at the Department of Communication Studies, University of Montana. She can be reached at Department of Communication Studies, University of Montana, 32 Campus Drive, Missoula, MT 59821 or at christina.yoshimura@umontana.edu.

profound implications of family relationships in particular on lifelong needs such as attachment (e.g., Hazan & Shaver, 1987) and social support (e.g., Rook & Ituarte, 1999).

Direct competition for time and energy creates a tension between attending to family concerns and attending to work responsibilities. Scholars have identified that work–family conflict has a negative relationship with life and marital satisfaction (Greenhaus & Beutell, 1985; Netemeyer, McMurrian, & Boles, 1996) and a negative involvement in family roles (Adams, King, & King, 1996). Indeed, Golden (2009) noted that although work and family need not be adversarial, families are nonetheless pressured through organizational framing to support individuals primarily as workers, with a value on family for its own merits significantly compromised.

Work–family conflict is arguably a dialectic tension. Recognizing that this tension is salient with regard to critical family functions, further research regarding how this tension can be managed within a dialectic framework is warranted. Examining the communicative responses of married couples to the work–family dialectic can offer insight into how people cope with this tension and how differential communicative coping responses are related to relational quality. Investigation will not eradicate the work–family dialectic, but the discovery of productive communication for this conflict may bring the tension into a manageable and positively functioning role within families.

WORK–FAMILY AS A RELATIONAL TENSION

Work–family conflict is created by competing demands from work and family and consists of both a time element (incompatibility of schedules, not enough hours to attend to all responsibilities) and a psychological element (involving role or behavioral strain) (Edwards & Rothbard, 2000; Netemeyer et al., 1996; Parasuraman & Greenhaus, 1997). Although work–family conflict is considered

a problem for many families, not all relational tensions are entirely avoidable or necessarily negative.

Dialectical scholars embrace the perspective that relationships are managed through daily acts of working with change or tensions (Baxter, 1994; Baxter & Simon, 1993; Montgomery, 1993). These tensions are embodied as discursive struggles in conversations between individuals in a relationship (Baxter, 2009). Three predominant types of dialectic tensions consistently identified are openness–closedness, autonomy–connection, and predictability–change (e.g., Baxter, 1994; Baxter & Montgomery, 1996). An important characteristic of all dialectic tensions is that they exist as relational force against relational force rather than individual against individual.

Work–family conflict can effectively be considered a dialectic tension. First, the two poles that make up this tension (responsibilities to work and responsibilities to family), while not logical opposites, are functional opposites (Burke & Greenglass, 1987). Second, the two sides of the tension are interdependent with one another. Although some degree of separation between work and family is common, Nippert-Eng (1996) found that many people make a concerted effort to display pictures of family at work or to discuss the day's work events with family at night, thus indicating an inherent integration between these two. Krause and Afifi (2007) indicated that family stress is not left at home but continues to affect caregivers when they leave for the work realm. Finally, Edwards and Rothbard (2000) showed with precision the causal relationships between work and family constructs. They identified interrelatedness between work and family through spillover, resource drain, congruence, and work–family conflict. These links arise directly out of the interdependence of home and work.

Finally, family and work realms are in dynamic contradiction; both realms are characterized by flux. Family structure is changed through the entrance of new family members (birth, marriage,

adoption) and the exit of other family members (death, divorce, conflict). Along with these changes to family structure come changes in the needs of family members at different stages of development (Rodgers & White, 1993). Changes at work parallel these changes at home both in frequency and type. Employees join and leave the organization, and different periods of the fiscal or academic year require varying increases or decreases in work hours and organizational duties. Even individuals who are self-employed or work at home can suffer the strain, conflicts, and tension typical of office work environments (Jurik, 1998). Work and family realms are in a constant (albeit at times relatively slow) state of flux, and thus any attempt at a "once and for all" solution to the tension between work and family responsibilities will likely fail. Attempts to manage the tension must be continually revised as the contexts of work and home continue to transform.

COMMUNICATIVE RESPONSES TO WORK–FAMILY CONFLICT

Evidence offered here indicates that work–family conflict fulfills Baxter and Montgomery's (1997) three criteria for a dialectic tension. Baxter and Montgomery (1997) claimed that dialectic tensions "are created and sustained through communicative practices" (p. 337) and that communicative responses to dialectic tensions affect not only how a tension is currently felt but also how the tension will be experienced in the future (i.e., praxis).

Evaluating communicative responses to dialectic tensions moves the focus away from evaluating work–family conflict as a purely psychological and internal phenomenon and toward studying it as a socially shared phenomenon. Baxter and Montgomery's (1996, 1997) concept of praxis and Baxter's (2009) focus on discursive struggles emphasize that people come to understand and evaluate their experiences through discussion with others. Medved (2010) specifically noted that relational messages regarding work–family

play a significant role in reproducing the conflict. The way that an event is communicatively framed will shape the subjective reality of that event for the people who have experienced it and also their perception of events in the future.

Eight communicative responses (or praxis patterns) to dialectic tensions have been identified with some frequency: denial, disorientation, spiraling alternation, segmentation, balance, integration, recalibration, and reaffirmation (Baxter & Montgomery, 1996, 1997). It is uncommon to see particular communicative responses prescribed for certain situations. In a rare study, Baxter (1990) found that some communicative responses are more commonly used for some dialectic tensions than for others. In addition to noting the frequency with which the communicative responses were used, Baxter (1990) also asked interviewees which responses led to the greatest relational satisfaction. Although segmentation was used most frequently in coping with the openness–closedness and novelty–predictability tensions, it was only linked positively with relational satisfaction when used with the novelty–predictability tension, not with the openness–closedness tension. Reframing, though infrequently used, was positively associated with the autonomy–connection tension.

Baxter's (1990) study provided preliminary support for the idea that some communicative responses might be used more frequently or effectively than others to manage the work–family conflict. Because work–family conflict has been shown to have a significant effect on individuals and their relationships with family, and because the work–family tension has been shown here to be dialectic in nature, specific communicative responses to the work–family dialectic tension warrant investigation.

Previous work on the dialectics involved in communication and relationships has focused almost exclusively on qualitative aspects of both the tensions and the responses to these tensions (e.g., Baxter, 1990; Baxter & West, 2003; Braithwaite & Baxter,

1995; Rawlins, 1992). Frequently, interviews are used to elicit the experience of and response to relational tensions. However, Baxter and Erbert (1999) noted that this type of study "provides us with a richly textured look at what the . . . contradictions look like, but we have no quantitative insight into the relative intensities with which dialectical tensions are experienced in the process of relating" (p. 549). Additionally, studies that have employed some quantitative assessment of the tensions (Baxter, 1990; Baxter & Erbert, 1999; Erbert, 2000) have done so either through descriptive statistics or by asking participants to rate how important dialectic tensions were to various other relational constructs (such as turning points or conflict), with no attention given to the ways in which participants communicatively responded to these tensions. Establishing a quantitative assessment of communicative responses to dialectic tensions will allow for increased analysis regarding how individuals tend to respond to particular dialectic tensions.

Although a variety of elements might influence the level of work–family conflict on individual experiences, the dialectic focus on praxis provides an indication that the ways people *communicate* about the tension might have a significant relationship with the level of work–family conflict they feel. Because it is not possible at this time to predict precisely how the communicative responses of those with higher versus lower levels of work–family tension will differ, this issue is addressed in the form of the first research question:

RQ1: To what extent does the use of each response strategy relate to the respondents' level of work–family conflict?

As previously mentioned, scholars of dialectics argue that the productive management of tensions actually maintains relationships (Baxter, 1994; Baxter & Simon, 1993; Montgomery, 1993). Additionally, Baxter (1990) has indicated that unique communicative

response strategies are linked with relational satisfaction when used to manage specific dialectic tensions. Relational satisfaction has long been used as a central construct in assessing marital relationships and has been related to relationship cognitions, affect, and behaviors (Fincham & Bradbury, 1990). Marital satisfaction is best conceived as a relational element that can be affected and shifted throughout the trajectory of the relationship (Fincham & Beach, 2006); in considering it in light of similarly shifting dialectical tensions, marital quality should be assessed at several points in time rather than as a static construct. Thus the following question is asked to determine how the choice of communicative response strategy to work–family conflict might be related to the quality of the marital relationship over the entire trajectory of the relationship:

RQ2: To what extent does the use of each response strategy relate to the respondents' level of marital quality?

METHODS

Scale Development

No quantitative scales currently exist to examine the frequencies with which people use Baxter and Montgomery's (1996, 1997) eight communicative responses to dialectic tensions. Thus a scale containing items that tap into each of the eight communicative responses (denial, disorientation, spiraling alternation, segmentation, balance, integration, recalibration, and reaffirmation) was created for use in this study. Eighty items were adapted from qualitative data that Baxter and Montgomery (1997) published when identifying each of the communicative responses, with 10 items intended to tap into each of the eight responses to dialectical tensions.

Data reduction needed to take place for these 80 items to be translated into a manageable scale. Thus a convenience sample of 435 college students in the northwestern United States were

asked to respond, on a 5-point Likert-type scale ranging from 1 (*almost never*) to 5 (*almost always*), how often they used each of 80 communication behaviors to manage their own work–family conflict (between focusing on school work and focusing on family, i.e., parents). Participants ranged in age from 18 to 52 years (M = 20.60, SD = 3.64), 210 of whom were men and 223 of whom were women. Most (87.7%) participants self-identified as Caucasian, whereas 0.7% identified as Black/African American, 4.6% as Asian/Pacific Islander, 2.5% as Native American, 1.9% as Hispanic, and 2.5% as other.

Responses to the 80 items were run in a principal components factor analysis with promax rotation. Each behavior was run as a separate item in the analysis, with the criteria for a factor set at eigenvalues of 1 or greater, two items or more per factor, and primary loadings of at least .50 and all secondary loadings of .30 or lower. This resulted in a six-factor structure, which was then reparameterized after looking at Cattell's scree test. There appeared to be a natural break after the fourth point, so the test was rerun with four factors specified. Initial item loadings can be seen in Table 1. Changes were then made on a conceptual basis, with items that seemed most central to dialectic theory as articulated by Baxter and Montgomery's work added to or moved to the index predicted by theory and those that appeared more tangential or redundant removed when their removal improved the reliability of the index. These changes resulted in a clean, four-factor structure of 32 items grouped into the following indices: recalibration–reaffirmation responses (α = .80), balance–integration responses (α = .72), denial–disorientation responses (α = .86), and segmentation–cyclic alternation responses (α = .86). (For the full set of 32 items, see Table 1, overleaf.)

Although the work–family dialectic is likely felt differently when one has dependents to care for or full-time work to attend to (as opposed to responsibilities of the average college student),

the suitability of this sample for helping to create this measure was deemed appropriate. The primary goal of this line of research is to establish a measure of responses to work–family tension that apply in a number of situations (those with and without children, in full- or part-time work, with or without elder parents or a partner, etc.), so the specific amount or type of work–family tension college students experienced was not required to be the same as those in any other situation to be useful. Additionally, the secondary goal was to factor analyze the items into reliable groupings that fit with previous studies on dialectics, and the larger sample of students significantly aided in this endeavor.

Participants

Participants in the main study consisted of 154 individuals recruited from two workplace organizations, one in the southwestern United States (a health organization) and the other in the northwestern United States (a manufacturing plant). Each organization employed approximately 300 people at a wide range of salaries and for a wide variety of work responsibilities. The age of the participants ranged from 20 to 67 years (M = 48, SD = 9.09). All participants were married 2 or more years to their current partners (M = 20 years, SD = 11.66). Participants were asked to identify how many children or elderly persons currently resided with them (for children, M = 0.90, SD = 1.03; for elders, M = 0.06, SD = 0.24).

Of the 154 respondents, 85 were men and 69 were women. Racial diversity was low, with 89.5% of respondents self-identifying as Caucasian, 1.3% as Black/African American, 2.0% as Asian/Pacific Islander, 4.6% as Hispanic, and 2.6% as other. Participants reported working in their current employment positions from a range of zero to 41 years (M = 10.02, SD = 9.86) and worked from 7 to 16 hours in a typical workday (M = 9.37, SD = 1.58). Participants reported their individual annual incomes as ranging from under $20,000 to over $100,000 ($M$ = $41,000–50,000, SD = 2.12).

Table 1. *Pilot Test Initial Factor Loadings for Indexes of Segmentation–Alternation, Denial–Disorientation, Recalibration–Reaffirmation, and Balance–Integration*

	S–A	D–D	R–R	B–I
Talk about one side, then other	.687			
Alternated talk of side by context	.759			
Trade-offs to talk about both sides	.745			
Privilege one side, then other	.535			
Both sides at a time, achieve neither	.560			
Switch talk from one side of tension to other	.607			
Shift from topics, shift side of tension focus	.592			
Emphasize one side for a time, then other	.729			
Let each side come up in appropriate context	.569			
Find a way to emphasize both to an extent	.561			
Deny one side of tension as necessary		.584		
Negative when talking about tension		.561		
Ignore one side of tension, focus on other		.667		
Disregard one side of tension in discussion		.663		
Disoriented about how to manage two sides		.580		
Minimized importance of one side of tension		.633		
Unable to deal with contradiction of needs		.601		
Choose not to talk about one side of tension		.680		
Avoid discussing one side of tension		.579		

Table 1 *(continued)*

	S–A	D–D	R–R	B–I
Highlight only one side during interactions		.624		
Place all focus on one side, not on other		.719		
Said didn't see as problem once did			.578	
Recognized tension would stay, and is OK			.702	
Said that tension made life interesting			.608	
Said important to experience tension			.749	
Recognized experiencing tension as healthy			.680	
Said tension exists to make relation stronger			.704	
Compromised to focus both sides at once				.508
Responded to both sides without compromise				.683
Talked about sides together, not opposition				.613
Integrated two sides to focus fully on both				.659
Told others sides not in contradiction				.593

Note. $N = 435$. Extraction method: principal component analysis; rotation method: promax with Kaiser normalization. S–A = segmentation–alternation; D–D = denial–disorientation; R–R = recalibration–reaffirmation; B–I = balance–integration.

Procedures

Each organization was sent 300 surveys, with the stipulation that respondents must be 18 years of age or older and must be married to their current partners for 2 or more years (to evaluate both current marital quality and marital quality over a period of time). At each organization, approximately one-third of the surveys were e-mailed to employees at their work e-mail addresses. Approximately two-thirds of the employees at each organization were without e-mail, so these employees received the survey in hard-copy form. Respondents could choose to include a detachable slip with their contact information to be entered into a drawing for $100. Sealed boxes were placed in each organization so that respondents could confidentially submit their entry slips.

Measures

Communicative responses to dialectic tensions were assessed via the 32-item scale established in the pilot study reported previously. Respondents were asked to report how often they engaged in each communicative response to work–family conflict over the course of their marriage. A 7-item Likert scale ranging from 1 (*almost never*) to 7 (*almost always*) was substituted for the 5-point scale used previously to enable greater discrimination in the use of each response strategy to the tension. Owing to changes in the average age of the population being studied, the type of work–family conflict being studied, and the points on the scale being changed in this round of data collection, another exploratory factor analysis was run to evaluate the structure of the scale. Responses were entered into a principal components factor analysis with promax rotation that was specified for a four-factor structure. There was a high degree of correspondence between the indices found in the pilot study and those found in the main study. Primary loadings for each of the 32 items can be seen in Table 2. The index of segmentation–alternation response (S–A) yielded a Cronbach's α of .71; the index

of denial–disorientation response (D–D) yielded a Cronbach's α of .87; the index of recalibration–reaffirmation response (R–R) yielded a Cronbach's α of .83; and the index of balance–integration response (B–I) yielded a Cronbach's α of .82. This factor structure, used in all analyses that follow, varied only slightly from the structure established during the earlier stage of scale development.

The outcome variable of work–family conflict was assessed in several ways. The survey instrument began by introducing the concept of work–family conflict as based on the work of Netemeyer et al. (1996): "a feeling that paid employment (work) and family responsibilities are incompatible to some degree. It can be hard to be a good worker and a good family member. This is called a work/family tension." This definition was followed by Netemeyer and colleagues' 5-item Work Family Conflict Scale to assess the level of work–family conflict being experienced (α = .92).

Previous dialectic work has used the retrospective interview technique to determine how the experience of a dialectic tension changes for the participant over time (e.g., Baxter & Erbert, 1999; Erbert, 2000). In keeping with this technique, participants in this study were asked to fill out a retrospective graph with length of marriage along the *x* axis and level of work–family tension (increasing on a scale of 1 [*no tension*] to 10 [*unbearable tension*]) on the *y* axis. Participants were asked to recall their level of work–family conflict at the start of their marriage and on the day they filled out the survey as well as moments of substantial change in their level of work–family conflict over the course of their relationship. Participants labeled these moments of change as turning points on the graph. Levels of work–family conflict at the start of the marriage, at each turning point, and on the day the survey was filled out were averaged to compute a mean level of work–family conflict for each participant over the course of his or her marriage. Each turning point was also used to compute the amount of variance

Table 2. *Primary Factor Loadings on Indexes of Segmentation–Alternation, Denial–Disorientation, Recalibration–Reaffirmation, and Balance–Integration*

	S–A	D–D	R–R	B–I
Talk about one side, then other	.694			
Alternated talk of side by context	.700			
Privilege one side, then other	.445			
Switch talk from one side of tension to other	.825			
Unable to deal with contradiction of needs	.519			
Said didn't see as problem once did	.282			
Deny one side of tension as necessary		.573		
Avoid discussing one side of tension		.671		
Negative when talking about tension		.495		
Ignore one side of tension, focus on other		.784		
Disregard one side of tension in discussion		.666		
Minimized importance of one side of tension		.751		
Choose not to talk about one side of tension		.660		
Highlight only one side during interactions		.724		
Place all focus on one side, not on other		.860		
Responded to both sides without compromise			.414	
Said that tension made life interesting			.839	
Integrated two sides to focus fully on both			.512	
Said important to experience tension			.776	

Table 2 *(continued)*

	S–A	D–D	R–R	B–I
Recognized experiencing tension as healthy			.735	
Said tension exists to make relation stronger			.794	
Told others sides not in contradiction			.448	
Compromised to focus both sides at once				.394
Recognized tension would stay, and is OK				.406
Disoriented about how to manage two sides				.437
Find a way to emphasize both to an extent				.543
Shift from topics, shift side of tension focus				.543
Trade-offs to talk about both sides				.686
Emphasize one side for a time, then other				.561
Both sides at a time, achieve neither				.498
Talked about sides together, not opposition				.429
Let each side come up in appropriate context				.821

Note. $N = 154$. Extraction method: principal component analysis; rotation method: promax with Kaiser normalization and four factors specified.

in work–family conflict experienced by each participant over the course of his or her marriage.

Marital quality was assessed based on items from Norton's (1983) Quality Marriage Index; marital quality at the start of the marriage, on the day the survey was taken, and at each of the turning points identified by the participants (for a total of 10 possible points in time) was assessed. To prevent participant fatigue, two of the six items from Norton's index were used: one that asked participants to rate how stable their marriage was at that point in time and another that asked participants to rate how happy their marriage was at that point in time. Cronbach's α for marital quality ranged from .87 to .95 over the 10 points in time. Descriptive statistics and intercorrelations for all variables are reported in Table 3.

Finally, the instrument included demographic information comprising questions of age, racial background, hours worked per day, number of dependents (children and elderly relatives living in the home), length of marital relationship, and length of current employment. Correlations between these demographic variables and all dependent variables are available in Table 4.

RESULTS

Research Question 1

RQ1 inquired about the relationship between the use of response strategies to work–family conflict and participants' experience of work–family conflict. Hierarchical regressions were used to determine which communicative responses predicted participants' experiences of work–family conflict. Three separate regressions were run to explore this relationship. The first regression examined participants' *current levels of work–family conflict.* Demographic variables that significantly correlated with the criterion variable of current work–family conflict (number of hours worked per day and annual salary) were entered into the first block of the regression

Table 3. *Descriptive Statistics and Intercorrelations Between Predictor and Criterion Variables of Interest*

					Response				Marital quality		Work–family conflict		
Variable	***M***	***SD***	**High**	**Low**	**S–A**	**D–D**	**R–R**	**B–I**	***M***	**Curr.**	**Curr.**	***M***	**Var.**
S–A response	3.38	1.13	1.00	6.57	1.00	_	_	_	_	_	_	_	_
D–D response	2.67	1.08	1.00	5.82	.18**	1.00	_	_	_	_	_	_	_
R–R response	3.39	1.21	1.00	7.00	.34**	.05	1.00	_	_	_	_	_	_
B–I response	3.74	1.16	1.00	7.00	.63**	–.01	.63**	1.00	_	_	_	_	_
Mean marital quality	5.27	1.13	1.67	7.00	–.08	–.26**	.88	.03	1.00	_	_	_	_
Curr. marital quality	5.43	1.48	1.00	7.00	–.01	–.30**	.16	.08	.75**	1.00	_	_	_
Curr. wk–fm conflict	3.81	1.42	1.00	7.00	.17*	.27**	–.16	.02	–.05	–.15	1.00	_	_
Mean wk–fm conflict	5.05	1.49	1.10	7.75	.23**	.20*	–.03	.14	–27**	–.25**	.33**	1.00	_
Var. wk–fm conflict	7.24	4.56	.13	21.13	.05	.03	–.05	.01	–.03	–.03	.19*	.30**	1.00

Note. $N = 154$.
*$p < .05$. **$p < .01$. All probability values are two-tailed.

Table 4. *Correlations Between Demographic Variables and Criterion Variables of Interest*

	Work–family conflict			Marital conflict	
Demographic variable	**Current**	**Mean**	**Variance**	**Current**	**Mean**
Age	–	–	–	–	–
Gender[1]	–	–	.21**	–	–
Race[2]	–	–	–	.20*	–
Hours worked per day	.39****	–	–	–	–
Length of marriage	–	–	–	.20**	.18*
No. children in home	–	–.21**	–	–	–
No. elders in home	–	–	–	–	–
Years worked in position	–	–	–	.23***	.28****
Years worked with organization	–	–	–	.20*	.17*
Salary	.24**	–	–	–	–
Organizational affiliation	–	–	–	–	–

Note. $N = 154$. All nonsignificant correlations were omitted.
*$p < .05$. **$p < .01$. ***$p < .005$. ****$p < .001$. All probability values are two-tailed.

Table 5. *Summary of Hierarchical Regression Analysis for Variables Predicting Participants' Current Levels of Work–Family Tension*

Variable	*B*	*SEB*	β
Step 1			
Hours worked per day	.34	.07	.40***
Pay grade	.13	.05	.21**
Step 4			
D–D response	.36	.10	.72***
S–A response	.12	.14	.08
R–R response	−.11	.12	−.09
B–I response	.21	.15	.15

Note. $N = 154$. Total $R^2 = .34$, adjusted $R^2 = 31$. $F(6, 122) = 10.42$, $p < .001$. ΔR^2 for Step 1 = .21, p › .001. ΔR^2 for Step 2 = .13, $p < .001$.
*$p < .05$. **$p < .01$. ***$p < .001$.

to control for their effect on the tension.[3] In the second block, the four communicative response types (S–A, D–D, R–R, and B–I) were entered into the regression together.

Multicollinearity among the four predictor variables passed the tolerance test (at levels of .96, .96, .95, and .96, respectively); thus the predictor variables were not transformed. The regression resulted in a significant effect for D–D response, $\beta = .27$, $p < .001$. The regression yielded two models, with the first resulting in a significant $\Delta R^2 = .21$, $p < .001$, the second in a significant $\Delta R^2 = .13$, $p < .001$. Full results of the regression can be found in Table 5.

A second regression was run to explore *mean levels of work–family conflict* over the course of participants' adult family lives in their current marriages. This was done to gain a more long-term, if retrospective, outlook on the predictive value of the four communicative responses in relation to the work–family conflict. This

regression was structured identically to the first, except for replacing number of hours worked per day and annual salary with the demographic variable significantly correlated with the mean level of work–family conflict (number of children currently living at home).

Multicollinearity among the four predictor variables passed the tolerance test (at levels of .97, .98, .99, and .99, respectively). The regression resulted in a significant effect for R–R response, $\beta = -.20$, $p < .05$. This regression yielded two steps, with a ΔR^2 for Step 1 at .04, $p < .05$, and a ΔR^2 for Step 2 at .07, $p < .05$. Full results of this regression can be found in Table 6.

Finally, a third regression was run to explore *overall variance in levels of work–family conflict* over the course of participants' adult family lives in their current marriages. Variance gave a slightly different long-term perspective, more precisely indicating the ebb and flow of the work–family conflict over the course of participants' marriages, than did mean levels of work–family conflict. As no variables showed significant correlation with overall variance in work–family conflict, the four communicative response types (S–A, D–D, R–R, and B–I) were entered into the regression in one block. The regression resulted in no significant results for any of the four types of communicative responses.

RQ1 asked how each of the response strategies was related to the respondents' levels of work–family conflict. Although it appears that none of the communicative response types has any relationship to the *variance* in work–family conflict an individual is likely to experience over the long term, D–D responses appear to be positively related to *current* work–family conflict, and R–R responses appear to be negatively related to the *mean* level of work–family conflict over the course of the marriage.

Research Question 2

RQ2 sought to explore the relationship between the use of response strategies to dialectic tension and participants' overall marital quality.

Table 6. *Summary of Hierarchical Regression Analysis for Variables Predicting Participants' Mean Levels of Work–Family Tension Over the Course of Their Marriages*

Variable	*B*	*SEB*	β
Step 1			
No. children at home	−.25	.12	−.17*
Step 2			
D–D response	.18	.12	.13
S–A response	.08	.16	.06
R–R response	−.28	−.14	−.20*
B–I response	.32	.17	.22

Note. $N = 154$. Total $R^2 = .12$, adjusted $R^2 = 08$. $F(5, 134) = 3.50$, $p < .01$. ΔR^2 for Step 1 = .04, $p < .05$. ΔR^2 for Step 2 = .07, $p < .05$.
*$p < .05$. **$p < .01$. ***$p < .001$.

Hierarchical regressions were again chosen to determine which communicative responses predicted participants' levels of marital quality. Two regressions were run to explore this relationship. In the first, participants' *current levels of marital quality* were investigated, with demographic variables that were significantly correlated with the criterion variables of current marital quality (race, length of marriage, years worked in current position, and years worked for current organization) entered into the first block of the regression to control for their effect on marital quality. In the second block, each of the four communicative response types (S–A, D–D, R–R, and B–I) was entered into the regression.

Multicollinearity among the four predictor variables passed the tolerance test (at levels of .99, .97, .98, and .99, respectively); thus the predictor variables were not transformed. The regression resulted in a significant effect for D–D response, $\beta = -.23$, $p < .05$. There was a significant $\Delta R^2 = .11$, $p < .01$, for the first step in the

Table 7. *Summary of Hierarchical Regression Analysis for Variables Predicting Participants' Current Martial Quality*

Variable	*B*	*SEB*	β
Step 1			
Race	.40	.17	.19*
Length of marriage	.01	.01	.10
Years worked in current position	.02	.01	.13
Years worked for current organization	.01	.01	.06
Step 2			
D–D response	–.32	.12	–.23*
S–A response	–.11	.15	–.07
R–R response	.14	.14	.11
B–I response	.21	.18	.14

Note. $N = 154$. Total $R^2 = .19$, adjusted $R^2 = 14$. $F(8, 123) = 3.66$, $p < .001$. ΔR^2 for Step 1 = .11, $p < .01$. ΔR^2 for Step 2 = .09, $p < .05$.
*$p < .05$. **$p < .01$. ***$p < .001$.

regression and a significant $\Delta R^2 = .09$, $p < .05$, for the second step. Full results of the regression can be found in Table 7.

In the second regression concerning marital quality, participants' *mean levels of marital quality* were investigated. Although the data were retrospective, looking at marital quality over the length of the marriage provides a more long-term perspective of the predictive value of the four communicative responses in relation to marital quality. This regression was set up identically to the previous regression regarding marital quality, with length of marriage, years worked in current position, and years worked for current organization substituted in the first block as those correlated with mean level of marital quality.

Multicollinearity among the four predictor variables passed

Table 8. *Summary of Hierarchical Regression Analysis for Variables Predicting Participants' Mean Levels of Marital Quality Over the Course of Marriage*

Variable	*B*	*SEB*	β
Step 1			
Length of marriage	.01	.01	.07
Years worked in current position	.03	.01	.25**
Years worked for current organization	.00	.01	−0.10
Step 2			
D–D response	−.18	.09	−.18*
S–A response	−.19	.12	−.17
R–R response	.08	.10	.08
B–I response	.12	.13	.11

Note. $N = 154$. Total $R^2 = .09$, adjusted $R^2 = .07$. $F(7, 129) = 3.42$, $p < .01$. ΔR^2 for Step 1 = .09, $p < .01$. ΔR^2 for Step 2 = .07, $p < .05$.
*$p < .05$. **$p < .01$. ***$p < .001$.

the tolerance test (at levels of .99, .98, .99, and .99, respectively). The regression resulted in a significant effect for D–D response, $\beta = -.18$, $p < .05$. Two steps resulted from the regression, with the first yielding a $\Delta R^2 = .09$, $p < .01$, and the second a $\Delta R^2 = .07$, $p < .05$. Full results of the regression can be found in Table 8. Thus the answer to RQ2 is that there is a significant, negative correlation between use of D–D responses and both current and mean marital quality.

DISCUSSION

Results of Research Questions 1 and 2

This study framed work–family conflict as a significant and enduring dialectic tension that could be investigated in light of communicative

responses used to cope with other forms of dialectic tensions. The results from this study indicate that certain communicative responses to the work–family conflict account for a significant amount of the variance in individuals' experiences of their work–family conflict and for a significant amount of the variance in their marital satisfaction. They also provide evidence for the function of certain communicative responses as both a coping measure for dialectics on an individual level and a possible maintenance behavior that may extend to the dyadic level.

Baxter and Montgomery (1996, 1997) have pulled denial and disorientation away from the other six responses they discussed by indicating that these two responses tend to be less functional than others in responding to dialectic tensions. It is unsurprising that these would load together here as one factor, given that both are characterized by viewing the tension at hand negatively or fearfully. Given previous dialectic work that identifies these responses as unproductive in managing the tension, it is also consistent that more frequent use of the D–D response was related to a *higher* level of mean work–family tension and a *lower* level of both current and overall marital quality.

Psychologically, D–D responses seem to involve detachment from the problem rather than active management. In studies related to other forms of stress or tension, a lack of active engagement with the tension or detachment from it have been linked to an increase in the severity of the stressor. Studies of posttraumatic stress (Dunmore, Clarke, & Ehlers, 2001; Herbst, 1992), recovery from surgery (Peerbhoy, Hall, Parker, Shenkin, & Salmon, 1998), and the stress of organizational change (Antonioni, 1995), although varied in terms of stressor, have all shown that active engagement and a sense of control over a stressor or tension increase the ability to manage the tension. A communicative response of D–D alienates both self and partner from feeling control over the work–family conflict and, in answer to RQ1, is

positively associated with current levels of work–family conflict.

The negative valence intrinsic in this type of response may add to the pressure exerted on individuals faced with the work–family conflict. Frequent use of negatively valenced behaviors tends to increase the salience of negative relational aspects and decrease the salience of positive relational aspects, according to the concept of negative sentiment override identified by Weiss (1980) and Gottman and Notarius (2000). Thus, on an individual level, frequent and global engagement in negatively valenced behaviors is likely to cause other negative aspects of the work–family conflict or the marriage to come to the forefront of consciousness, thus increasing the felt tension and decreasing relational satisfaction. Although dyadic-level data were not collected here, they would be helpful in uncovering whether marital quality is reduced not only for the individual managing the work–family conflict but also for the marital partner who is the target of the negatively valenced responses to the dialectic tension. The decrease in marital quality related to the frequent use of D–D response may be partially accounted for by changes in the marital partner's behavior. In response to RQ2, D–D responses are negatively correlated with both current and mean marital quality.

Responses of recalibration and reaffirmation entail a very specific attitude change when compared with the other responses in that they emphasize the most positive perspective on the dialectic tensions. Although neither one changes the essential nature of work and family as being oppositional in many ways, neither do they focus on making the opposition the most salient aspect of the tension. A response of recalibration attempts to find temporary aspects of work and family that are not entirely oppositional or that overlap to some degree. Reaffirmation responses recognize the incompatibility of work and family but view the presence of each side of the tension in life as something to be celebrated, not to be overcome. Given the more positive outlook on tensions that these

responses share in comparison to the others, it is natural that they would group together into a single factor: R–R.

In this study, greater use of R–R responses was significantly related with a lower mean level of work–family conflict. Individuals who used R–R to frame the tension in a positive light when talking to marital partners were attributing positive affect to their marital relationships and to their work responsibilities. This may function in a way that contributes to what Weiss (1980) and Gottman and Notarius (2000) termed *positive sentiment override.* If a couple creates a globally positive relationship, negative elements that emerge are often downplayed or overlooked because the positive aspects of the relationship are so salient. Thus using the positively valenced response of R–R is likely working to highlight the positive aspects of the work–family conflict (thus possibly alleviating distress that can result from managing the tension). Although the response itself may not change the tension, it may change the subjective interpretation and thus the subjective reality for people experiencing the tension.

Unlike D–D responses, R–R responses entail a claim on the work–family conflict—either that they can be managed or that they are beneficial. As previously mentioned, taking a "survivor" or control perspective on a stressor positively affects one's ability to cope with the stressor (e.g., Herbst, 1992), likely bringing it to lower levels than in those who abdicate responsibility or control. Thus a communicative response of R–R likely creates psychological well-being for the individual experiencing the tension.

If D–D reflects despair and resistance to the tension, and R–R reflects control and acceptance of the tension, they can be seen as two extreme and opposite responses to the experience of work–family conflict. The middle ground between these are the response of S–A and B–I. S–A responses involve addressing only one side of the tension at a time and set the two sides of the tension up as permanent and mutually exclusive elements. The communicative

response of B–I (trying to engage to a moderate amount with both sides of the tension at the same time through balance and trying momentarily to fully manage both sides of the tension at the same time through integration) communicates that both sides of the tension can get some focus but that neither side will be fully engaged or realized. The positive aspect of active engagement with the tension may be offset by the frustration of diluting or not fully realizing either work or family. Neither S–A nor B–I was significantly related with any element of work–family conflict or marital quality. Because these responses were used at a similar frequency as the other communicative responses, it is likely that the lack of a significant relationship stems more from the nature of the response than from the use of the response strategy. One possible explanation for the lack of relationship between these factors and the variables studied here is that the character of these responses prevents them from doing much harm but also restricts them from doing much good.

Implications of the Study

On the whole, these results emphasize the role that a communicative response plays in the experience of work–family conflict. The choice of response to (what is for many people) the unavoidable tension between work and family responsibilities is significantly related to the level of work–family conflict that is experienced. The significance of the responses of D–D and R–R may rest in the positive–negative valence of the communicative response and the amount of control–responsibility for the tension communicated in each response. As these hypotheses emerged out of the current results, rather than vice versa, future studies should further explore the relationship of control and affect within each of these responses and possibly engage in manipulations of control and affect within the response types, as well.

This study also aimed to explore work–family conflict with a

specific interest in how the tension and its management were related to familial, rather than organizational, variables. The results of this study showed that a significant relationship exists between work–family conflict and marital quality, but interestingly, this relationship was most significant over the long term. Participants' *current* levels of work–family conflict were not significantly related with their marital quality at all, but the *average* level of work–family conflict that participants' maintained over the course of their marriages was significantly correlated with marital quality. The greater the average level of work–family conflict over the course of the marriage, the lesser the current marital satisfaction and the average satisfaction over the length of the marriage.

From this, family members, family therapists, and family studies researchers can take heart. Momentarily high levels of work–family conflict are unlikely to destroy a marriage or to prevent family members from reaping the positive rewards of healthy family interaction. Certain moments in work and/or family life may necessitate carrying a temporarily high level of work–family tension. However, family members experiencing the tension should work to alleviate the tension when possible and to manage the tension in such a way that it does not remain high on average.

The results of this study indicate an interesting trend regarding gender and work–family conflict. Although previous studies have certainly found that men experience work–family conflict (Carr, 2002; Galinsky, Johnson, & Friedman, 1993), the gap between frequency and intensity of the work–family conflict for men and women still exists. However, among this sample of participants, there was no significant difference between men and women and their reports of either their long-term or current levels of work–family conflict. Perhaps these results fulfill Carr's (2002) prediction that each generation of men will feel a greater need to manage work and family responsibilities than did the generations before them. It certainly reinforces Duckworth and Buzzanell's (2009) work,

indicating that men see themselves as actively engaged in webs of responsibility to others at both home and work.

It will be important to continue to examine the qualitative experience of men and women in relation to work–family conflict. Hochschild's (1989, 1997) work indicates that men take on less of the "second shift" of caring for home and family than do women. Perhaps with the gap closing between men's and women's felt levels of work–family conflict, so too will the gap close between the household and family responsibilities of men and women. Additionally, simply because men and women feel similar levels of work–family conflict does not mean that the level *means* the same thing to both men and women. As work and family tensions endure for both men and women, qualitative studies are necessary to complement quantitative studies such as this one to provide greater explanation for empirical changes.

In short, communicatively framing the relational tension in discussion with family members is significantly related to levels of work–family conflict so that communication aimed at reframing or recalibrating the tension is negatively associated with the felt level of the tension. D–D responses, however, are positively associated with felt level of the work–family conflict and with relational dissatisfaction.

Limitations and Future Directions

Although this study moved beyond some frequently noted research limitations, it is not without drawbacks. First, although a valid and reliable quantitative measure to measure the communicative responses to dialectic tensions was created for this study, the measure will increase in validity with continued testing. Ideally, a measure such as the one created here would be able to be used with any type of dialectic tension. Continued analysis of the factor structure with responses from a variety of respondents on a variety of tensions will lend more credibility to this new scale.

Second, although a large pool of participants was generated for the initial scale development, the participants engaged in the main study were fairly few in number. Finding respondents who had sufficient work and family experiences to be able to comment on their work–family conflict over a significant period of time proved challenging. Thus, although the participants were richly varied in terms of age, length of working years, length of marriage, region, organization type, and income, more responses would have provided more power to these findings. An increased variation in cultural background and experience of participants may also have brought to light additional relationships between communicative responses, work–family conflict, and marital satisfaction.

In the current study, communication covaried with both the level of work–family conflict participants experienced and the marital satisfaction they reported. Alternative explanations for a relationship between communication, work–family conflict, and marital satisfaction were controlled for within the statistical regressions. However, elements were not sufficiently examined across time to be able to determine causal relationships. It may be necessary that future studies retain participants that will be willing to report on their communication, work–family conflict, and marital satisfaction over a period of time rather than at one particular moment in time.

The experience of family life is richly textured, and the current study only begins to scratch the surface of how it is related to the widespread and persistent presence of work–family conflict. Many future avenues can be explored now that an association has been established between communication about work–family conflict, level of work–family tension, and marital satisfaction. What should remain a constant in the studies to follow is an emphasis on translating this research into practically applicable solutions. Research on a phenomenon as salient and taxing as work–family conflict

belongs not in an ivory tower but in the hands of counselors, employers, policy makers, and family members themselves so that change aimed at alleviating work–family tension can be initiated.

AUTHOR'S NOTE: Dr. Yoshimura would like to sincerely thank Dr. Kory Floyd for his invaluable help with this project and Drs. Alan Sillars and Steve Yoshimura for their assistance in editing the manuscript.

NOTES

1 Gender was dummy coded here and throughout the analyses as 0 = male and 1 = female. Gender was significantly correlated with variance in work–family tension (such that women experienced more variance in work–family tension over the course of their marriages than men did), but no other gender differences between men, women, and their experiences of work–family tension arose from these data.

2 Race was coded categorically here with 0 = African American, 1 = Asian/Pacific Islander, 2 = Native American, 3 = Hispanic, 4 = Caucasian, and 5 = other. One-way analyses of variance were run between race and each of the four communicative responses to the tension; none of these analyses indicated significant differences in racial identification in relation to communication response strategies.

3 To arrive at a parsimonious model, only those demographic variables correlated with the dependent variable were entered into each regression. However, to account for the influence noncorrelated demographic variables could have on the regression model, each regression reported here was also run with all demographic variables included. The only difference to arise with these regressions was the addition of significance for length of work with one's current organization in relation to mean work–family conflict.

REFERENCES

Adams, G. A., King, L. A., & King, D. W. (1996). Relationships of job and family involvement, family social support, and work–family conflict with job and life satisfaction. *Journal of Applied Psychology, 81*(4), 411–420.

Antonioni, D. (1995). Practicing conflict management can reduce organizational stress. *Industrial Management, 37*(5), 7–9.

Baxter, L. A. (1990). Dialectical contradictions in relationship development. *Journal of Social and Personal Relationships, 7*, 69–88.

Baxter, L. A. (1994). A dialogic approach to relationship maintenance. In D. J. Canary & L. Stafford (Eds.), *Communication and relational maintenance* (pp. 233–254). New York: Academic Press.

Baxter, L. A. (2009). *Discursive struggles of relating.* Carroll C. Arnold lecture presented at the 2001 National Communication Association Convention, Chicago.

Baxter, L. A., & Erbert, L. A. (1999). Perceptions of dialectical contradictions in turning points of development in heterosexual romantic relationships. *Journal of Social and Personal Relationships, 16*(5), 547–569.

Baxter, L. A., & Montgomery, B. M. (1996). *Relating: Dialogues and dialectics.* New York: Guilford Press.

Baxter, L. A., & Montgomery, B. M. (1997). Rethinking communication in personal relationships from a dialectical perspective. In S. W. Duck (Ed.), *The handbook of personal relationships* (2nd ed., pp. 325–349). New York: John Wiley.

Baxter, L. A., & Simon, E. P. (1993). Relationship maintenance strategies and dialectical contradictions in personal relationships. *Journal of Social and Personal Relationships, 10*(2), 273–283.

Baxter, L. A., & West, L. (2003). Couple perceptions of their similarities and differences: A dialectical perspective. *Journal of Social and Personal Relationships, 20*(4), 491–514.

Braithwaite, D. O., & Baxter, L. A. (1995). "I do" again: The relational dialectics of renewing marriage vows. *Journal of Social and Personal Relationships, 12*(2), 177–198.

Carr, D. (2002). The psychological consequences of work–family tradeoffs for three cohorts of women and men. *Social Psychology Quarterly, 65*(2), 103–124.

Cowan, R., & Hoffman, M. F. (2007). The flexible organization: How contemporary employees construct the work/life border. *Qualitative Research Reports in Communication, 8*(1), 37–44.

Duckworth, J. D., & Buzzanell, P. M. (2009). Constructing work–life balance and fatherhood: Men's framing of the meanings of both work and family. *Communication Studies, 60*(5), 558–573.

Dunmore, E., Clark, D., & Ehlers, A. (2001). A prospective investigation of the role of cognitive factors in persistent posttraumatic stress disorder (PTSD) after physical or sexual assault. *Behaviour Research and Therapy, 39*(9), 1063–1071.

Edwards, J. R., & Rothbard, N. P. (2000). Mechanisms linking work and family: Clarifying the relationship between work and family constructs. *Academy of Management Review, 25*, 178–199.

Erbert, L. A. (2000). Conflict and dialectics: Perceptions of dialectical

contradictions in marital conflict. *Journal of Social and Personal Relationships, 17*(4–5), 638–659.

Fincham, F. D., & Beach, S. R. H. (2006). Relationship satisfaction. In A. L. Vangelisti & D. Perlman (Eds.), *The Cambridge handbook of personal relationships* (pp. 579–594). New York: Cambridge University Press.

Fincham, F. D., & Bradbury, T. N. (1990). *The psychology of marriage: Basic issues and application.* New York: Guilford Press.

Galinsky, E., Johnson, A. A., & Friedman, D. E. (1993). *The work–life business case: An outline of a work in progress.* New York: Families and Work Institute.

Golden, A. G. (2009). Employee families and organizations as mutually enacted environments: A sensemaking approach to work–life interrelationships. *Management Communication Quarterly, 22*(3), 385–415.

Gottman, J. M., & Notarius, C. I. (2000). Decade review: Observing marital interaction. *Journal of Marriage and the Family, 62*(4), 927–947.

Greenhaus, J. H., & Beutell, N. J. (1985). Sources of conflict between work and family roles. *Academy of Management Review, 10*, 76–88.

Hazan, C., & Shaver, P. R. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology, 52*, 511–524.

Herbst, P. K. R. (1992). From helpless victim to empowered survivor: Oral history as a treatment for survivors of torture. *Women and Therapy, 13*(1), 141–155.

Hochschild, A. R. (1989). *The second shift.* New York: Avon Books.

Hochschild, A. R. (1997). *The time bind.* New York: Metropolitan Books.

Jurik, N. C. (1998). Getting away and getting by: The experiences of self-employed homeworkers. *Work and Occupations, 25*(1), 7–36.

Krause, S. S., & Afifi, T. D. (2007). Family-to-work spillover stress: Coping communicatively in the workplace. *Journal of Family Communication, 7*(2), 85–122.

Medved, C. E. (2010). Communication work–life research. In S. Sweet & J. Casey (Eds.), *Work and family encyclopedia.* Chestnut Hill, MA: Sloan Work and Family Research Network. Retrieved from http://workfamily.sas.upenn.edu/wfrn-repo/object/3kb6k5cb4ft79l8c

Montgomery, B. M. (1993). Relationship maintenance versus relationship change: A dialectical dilemma. *Journal of Social and Personal Relationships, 10*, 205–223.

Netemeyer, R. G., McMurrian, R., & Boles, J. S. (1996). Development and validation of work–family conflict and family–work conflict scales. *Journal of Applied Psychology, 81*(4), 400–410.

Nippert-Eng, C. E. (1996). *Home and work: Negotiating boundaries through everyday life.* Chicago: University of Chicago Press.

Norton, R. (1983). Measuring marital quality: A critical look at the dependent variable. *Journal of Marriage and the Family, 45*, 141–151.

Parasuraman, S., & Greenhaus, J. H. (1997). *Integrating work and family: Challenges and choices for a changing world.* Westport, CT: Quorum Books.

Peerbhoy, D., Hall, G. M., Parker, C., Shenkin, A., & Salmon, P. (1998). Patients' reactions to attempts to increase passive or active coping with surgery. *Social Science and Medicine, 47*(5), 595–602.

Raabe, P., & Gessner, J. (1988). Employer family-supportive policies: Diverse variations on a theme. *Family Relations, 37*, 196–202.

Rawlins, W. (1992). *Friendship matters: Communication, dialectics, and the life course.* New York: Aldine de Gruyter.

Rodgers, R. H., & White, J. M. (1993). Family development theory. In P. Boss, W. Doherty, R. LaRossa, W. Schumm, & S. Steinmetz (Eds.), *Sourcebook of family theories and methods: A contextual approach* (pp. 225–254). New York: Plenum Press.

Rook, K. S., & Ituarte, P. H. G. (1999). Social control, social support, and companionship in older adults' family relationships and friendships. *Personal Relationships, 6*, 199–211.

Sandberg, J. C. (1999). The effects of family obligations and workplace resources in men's and women's use of family leaves. In T. L. Parcel (Ed.), *Research in the sociology of work: Work and family* (pp. 261–281). Stamford, CT: JAI Press.

Trethewey, A., Tracy, S. J., & Alberts, J. K. (2006). Crystallizing frames for work–life. *Electronic Journal of Communication, 16*(3–4). Retrieved from http://www.cios.org/EJCPUBLIC/016/3/01636.HTML

Weiss, R. L. (1980). Strategic behavioral marital therapy: Toward a model for assessment and intervention. In J. P. Vincent (Ed.), *Advances in family intervention, assessment, and theory* (Vol. 1, pp. 229–271). Greenwich, CT: JAI Press.

Cultural Representation of Native Heritage in Murals: A Case Study of Chemainus, British Columbia

KRISTIN MOSS

California State University, San Marcos

This case study of the mural program in Chemainus, British Columbia, Canada, explores the use of public art as a successful strategy for economic viability based on tourism but questions how depictions of First Nations people affect ethnic relations for locals and international visitors. Critical visual analysis of murals, their production, and audience reception reveals how the images of the Native people serve to craft a sanitized and nostalgic historical narrative that erases Indigenous history and inserts dominant cultural values. The choice of source images for the art, the aesthetic style of the artwork, and the failure to include Native voices in mural production all serve to reproduce a colonial gaze, reinforce stereotypes, and continue the exploitation of Indigenous people by the dominant culture.

KEYWORDS: Murals, cultural identity, Native indigenous history, public art, Canadian national identity

> Art does not solve problems but makes us aware of their existence. It opens our eyes to see and our brain to imagine.
>
> —Artist Magdalena Abakanowicz

The well-established *pictorial turn* in communication scholarship (see Odenhall, 2003; Olson, Finnegan, & Hope, 2008) urges scholars to consider how images, visual culture, and art contribute to broader discourses of cultural and national identity, as exemplified by the

Kristin Moss, Ph.D., is an assistant professor in the Department of Visual and Performing Arts, California State University, San Marcos. She can be reached at California State University, 333 S. Twin Oaks Valley Road, San Marcos, CA 92096 or at kmoss@csusm.edu.

words of Abakanowicz. My work explores the possibilities for and challenges of building intercultural communities through public art and considers how artistic participation in democratic society can open spaces to engage diverse citizenry. I am interested in how public art reflects individuals' and communities' cultural identifications and representations (Collier, 2005) as well as how issues of agency and power might be implicated in cultural depictions in mural art (Foucault, 1990; hooks, 1996; Lippard, 2000a, 2000b). By illustrating ways that community art programs can become more inclusive and equitable in their artistic production, this study contributes to the work of scholars such as Becker (2002) and Jensen (2002), who explore the roles the arts and aesthetic experience play in democratic societies, including art and art education in urban regeneration projects (Blandy & Congdon, 1987; Fleming, 2007; Miles, 1989; Selwood, 1995). More specifically, my work considers how the contexts of production and audience reception of mural images affect their potential to create more inclusive spaces for intercultural dialogue.

Scholars who have studied murals from a communication perspective, such as LaWare (1998), Gallagher and LaWare (2007), and Moss (2010), have discussed how murals can foster a sense of ethnic pride and act as a catalyst for community activism and revitalization. These studies align with earlier work from Foss (1988), who established that art provides a sense of voice and an arena for civic participation for marginalized groups. Other scholars, including Drzewiecka and Nakayama (1998), Drzewiecka (2001), and Emmison and Smith (2000), extended the discussion of ethnic identity to include the physical spaces that people inhabit. This study examines the other side of the coin, suggesting that the progressive and emancipatory potential of public art is severely limited when the process of production is exclusionary and/or when the ethnic depictions participate in the project of justifying and erasing historical colonial violence.

This case study of the original "Muraltown"—Chemainus, Brit-

ish Columbia, Canada (see Chemainus Festival of Murals Society, 2012)—draws from my larger examination of influential mural programs in North America. With this essay, I offer a critical perspective on how the exclusion of Indigenous[1] voices in mural production and uninterrogated representational practices can affect public memory of ethnic relations, reinforce stereotypes, and exploit Native people. Though this small port town (population 4,000) seems an unlikely venue for an urban regeneration strategy using art in an intercultural community, it boasts a dramatic economic success story. In the 1980s, when the municipal government offered money for downtown revitalization projects, community resident Karl Schutz came up with the concept of painting the history of the town and region in murals. Today, there are 39 murals and a Festival of Murals (FOM) Society, and the significant increase in tourism has kept the community flourishing.

The investment in public art was successful as an economic recovery and diversification strategy for the town's White majority and business owners but did little to share the wealth with local Indigenous bands. The artwork has significantly shifted the identity of the town to one that supports dominant cultural norms around self-determination, hard work, and achievement based on industrialization and economic prosperity. A sanitized and romanticized historical narrative is told in the Chemainus murals that is packaged, literally and figuratively, for both locals and international visitors; this narrative reconciles past events and conflicts with the Indigenous people into an overall ideology of cultural pluralism. This shapes the public memory of Vancouver Island and contributes to public narratives of Canada's national identity. As a polyglot nation, Canada's national identity must subsume many groups' histories, and as Gillis (1994) explained, national memory is shared by many peoples, some of whom have never seen nor heard of one another yet regard themselves as having a common history.

In my examination of the murals and discourses surrounding

them, I employ Rose's (2001) critical visual methodology. Central to this approach is the idea that images should be taken seriously because visual representations and objects have their own effects and relationships with social conditions. Given that ways of seeing are culturally specific, critical scholars of images must also be self-reflexive.[2] Rose's methodology provides a framework for interpreting images by considering the context of production of an image, the formal elements contained in the artwork, and its audience reception. These three sites (production, image, audience) must all be investigated to understand the full complexity of an image's meanings and provided me with a structure for this essay.

For this essay, I focus primarily on murals depicting First Nations people and White Canadians.[3] These particular images connect the local history to the broader development of national identity in Canada, especially as it relates to the contemporary discourses of pluralism. In addition to arguing that commodification of images of Indigenous people serves mostly to profit the non-Indigenous people, I show how the art itself serves to construct a colonial gaze, reinforce stereotypes of Indigenous people, and continue their exploitation and marginalization by the dominant culture. To illustrate these claims, this essay first considers the context of mural production in Chemainus, next analyzes two murals of Native people in detail, and then takes audience reception of the murals into account.

CONTEXT OF MURAL PRODUCTION IN CHEMAINUS

Chemainus is a small port town on the eastern side of Vancouver Island, north of Victoria, in the Cowichan Valley of British Columbia. British and Western European influences in the region remain strong, with Victoria serving as the anchor city for Vancouver Island. British cultural artifacts pepper the city, from Union Jack flags and red double-decker buses to architecture reminiscent of

London, in stark contrast to cosmopolitan Vancouver, the capital of the province. Chemainus is not far off the Trans-Canada highway linking the two cities, with ferry service to Washington State on the south end of the island and to Vancouver on the north. Its physical location makes it a perfect gateway for international tourists to the Pacific Northwest of the United States and Canada.

The population of Vancouver Island is ethnically diverse. Originally, Indigenous peoples, called the Cowichan Indians, from the Coast Salish language group, populated the area, thriving on the natural resources of the forest and fishing. In the past two centuries, European Canadians colonized the area, bringing industry and mechanization to the region. The takeover of the island from its original inhabitants was marked by ethnic conflicts, and the Native population fought colonial expansion until their numbers were decimated by smallpox to the point that they could no longer resist (Olsen, 1963/1981). First Nations peoples who inhabit Vancouver Island today live mostly in separate reserves from the Euro-Canadians; 2006 census data estimate the aboriginal population on Chemainus First Nations lands to be 785.

The changes in Chemainus were astounding when the town used municipal funds to create an outdoor, visual history of the town and region. Beginning in 1982, the first of 39 murals was painted. As part of the mural project, community resident Karl Schutz also developed a long-term business plan to revitalize the downtown corridor in Victorian and frontier styles. Professional artists and the spectacle of them painting their work attracted local and tourist crowds; now there are more than a hundred new businesses and a tourist industry that brings between 350,000 and 450,000 people a year to the town. The town operates walking and trolley tours, brings bus tours for short visits, and sells a wide range of memorabilia using the mural images. The mill did later reopen, but because the economic base expanded, the town is now less vulnerable to reliance on a single industry.

The painting of the murals had a number of significant impacts on the cultural identity of Chemainus. Central to my work is the assumption that cultural identification and representation are ongoing, related, constitutive processes that require both interpretive and critical approaches to be understood. Building on concepts of intercultural scholars Collier (2005), Collier, Hegde, Lee, Nakayama, and Yep (2002), and Mendoza, Halualani, and Drzewiecka (2002), I conceive of cultural identifications as dynamic enactments and negotiations that are influenced by context, group affiliations, and public texts to constitute individual and collective identities. *Avowals* (how people see themselves or their groups) and *ascriptions* (how people see others or beliefs they hold about particular groups) are part of the ongoing negotiation of cultural identity. As a result of the mural project, the focus of this primarily working-class locale shifted from reliance on the logging and fishing industries to arts and tourism. The murals contributed to the economic viability and distinctiveness of Chemainus. Participating artist Harry Heine (personal communication, April 4, 2002) explains it this way: "Chemainus was a nothing. It wasn't even a town worth putting murals into, as a matter of fact. But it certainly made it, put it on the map. Worldwide." Chemainus even copyrighted a slogan ("The Little Town That Did") to suggest that the spirit of the local people is marked by perseverance and success.

Karl Schutz was the leader through the first few years of the program, which was called the Chemainus Mural Project, with the summer mural painting called the Festival of Murals; after 1985, the FOM Society was established using elected volunteers on a FOM Board to maintain and continue the program. Schutz, an entrepreneur, told me in a personal interview (April 11, 2002) that he wanted to develop "a whole new economy based on arts and tourism." His specific vision for the murals was to depict the history of Chemainus and the region through images grounded in historic research and photographs, largely taken from a book by

W. H. Olsen (1963/1981) titled *Water over the Wheel: A Story of Danger, Mystery, Heartbreak, and Success in the Chemainus Valley*. Schutz felt that his original program was successful in two ways. He said, "Number one in my book is instilling pride within the community. That's our greatest asset. That's what I'm most proud of. And, of course, the second goes without saying—the fantastic multi-million dollar economy." Schutz recognized the positive potential of murals for community building, but his focus on economic concerns overshadowed the vision of a fully inclusive community.

Schutz's reliance on the Olsen text as source material for all the early murals is one of the major factors that has shaped the theme, tone, and aesthetic of the historical narrative told through the murals. This colonial history was recounted by local mill accountant Olsen and his wife, who "pieced together tale and fact, pored over archives and records, sorted myth from reality to create a time-capsule of the Chemainus Valley" (Bunbury & Perry, 1998, p. 8). Despite the claim in the mural guidebook that Olsen's local history includes the Native history of the local area, only one 7-page chapter in a 169-page book focuses exclusively on the Indigenous population before the arrival of White settlers, which does not begin to attest to the long history of the Cowichan and Salish people. In chapters chronicling early pioneer life, the author tells many stories of the conflicts between the so-called Indians and White settlers, calls attention to their "savage" ways, and uses language to describe them that would be considered racist by today's standards.

From the beginning, there was resistance to the inclusion of ethnic representations in the murals and conflicts over mural content. In our interview, Schutz told me that he openly battled opposition from White business owners to murals containing ethnic depictions. For example, when a store owner objected to a mural design of a Chinese man, he confronted her directly and asked her who she thought built the railroads. In the end, Schutz prevailed, and Chinese figures were depicted in several murals as

workers on the railroads, as individual shopkeepers, and from the first-person narrative of an immigrant child. Representations are cultural processes of signifying practices and symbolic systems that discursively constitute meanings and subject positions, often controlled by societal institutions (Hall, 1996). In this case, Schutz used his position and municipal funding to offer visual space in the Chemainus history to the Chinese members of the community.

In another example, the first artist in the program, Frank Lewis, related how he decided to change his mural to exclude a depiction of an Indigenous person based on past experiences with another mural program:

> The first painting came out very well and that was the log boom and everybody was relatively happy with that. Big success in the paper, lots of publicity about it. The second mural was on the other side of the street where the mill workers were on the docks by the ship, so I started working on that one. The school teachers, the art teachers would bring their classes down and I would give a half-hour lecture on the value of a mural and what it does to the community and the Native people seeing their people within the community within the mural. The very fact that my mill worker man with a red shirt was an Indian didn't turn out very well to some folks. And I said, well, the majority of the guys working the mill were Indian. "They're not paying for it." Well, I'd already gone through that at the Maritime Museum in Vancouver. Only the people that paid money to support the Maritime Museum in Vancouver, they were the only ones who were allowed to be in my mural on the history of the Vancouver harbor. (personal communication, August 12, 2002)

As Foucault (1990) explained, networks of power relations encompass all social relationships, and cultural identifications and representations intersect discursively through written texts, everyday

speech, and visual texts. For Frank Lewis, the realities of economic power dictated the content of mural images rather than principles of democratic participation or inclusivity. This repeated experience of excluding ethnic representations demonstrates how those with economic power are able to control cultural representations, in this case, erasing Native people's presence in the history.

Over time, control of the mural making shifted from Schutz to the members of the FOM Board. When asked in an interview how the decision-making process works today, one FOM Board member stated laughingly, "It's very democratic. Quite heated. Occasionally quite abusive." One FOM Board president said that "all of the squabbling is up front," and this was what I witnessed during the meeting I attended. While the meeting process was quite democratic, the elected board members did not represent the ethnic diversity of the population. Despite claims that FOM Board members represent community interests, there are steps and procedures that privilege the residents who are primarily owners and shopkeepers in the downtown corridor. People who wish to participate must first become members of the FOM Society and then be elected to the FOM Board. It is sometimes difficult to engage enough volunteers, and the board tends to reflect those who are most involved already in the political leadership of the town. At the time of my visit, none of the FOM board members could recall having any representation of ethnic minority groups, such as Salish people or Asian Canadians, so their voices and interests were not included.

Native artists have also been excluded from the mural program, despite the area being a hub for Native artistic production. European Canadian artist Sandy Clark, who painted several of the murals and chose to relocate permanently to Chemainus, says that she did her best with the ethnic representations and really pushed for the inclusion of images of women. She and artist Constance Manning agreed on one area in which the mural program went wrong:

> In all the Native related images, not one Native artist has ever been used. I have a real problem with that. We missed the boat. So I think that has been a drawback in lack of representation. Not saying that the Native representations we've had in terms of the *artwork* haven't been wonderful, but we should have Native representation as *artists.* And because they could have brought another dimension in terms of painting . . . sculpting, yes, you have lots in sculpture and carving, but in terms of painting, there are Natives out here who are world renowned as painters, and what that would have brought is a totally different presentation of the art form from a totally different perspective. And I think we missed the boat. (personal communication, August 8, 2002)

Schutz claimed that he tried diligently to get a First Nations painter. Other artists commented that including traditional forms of Native sculpture, such as totem poles or Longhouse carvings, would be a better way to include First Nations artists.

One reason that First Nations painters were excluded from the mural program is that Schutz and later leaders favored a specific aesthetic and artistic style: realistic, three-dimensional representations painted from archival photographs that told a particular version of the local history. As Wolff (as cited in Herman, Jahn, & Ryan, 2005) has explained, "representationality" is a major characteristic of narratives, so totally abstract art cannot be narrative. Many First Nations painters from the region traditionally paint in a style common in the Pacific Northwest, characterized by stylized two-dimensional forms and images featuring animals, elements of the natural world, and symbols of spirits and mythical creatures. This style is representational, but not in the three-dimensional tradition of Western realism, so it was not included in the original vision, and contemporary Native work was not considered at all. Vancouver Island is a hub of First Nations contemporary artistry, which makes this omission particularly disturbing. Though

certainly no program can include every mode or style of artwork, the choice to exclude art that does not follow the traditions of Western realism excluded a wealth of skilled Native painters and artists.

MURAL ANALYSIS

In addition to documenting the exclusion of local First Nations people from participation in decision making and artistic creation, my exploration of the murals reveals several ways in which the depictions of Indigenous people in the Chemainus murals helps shape current perceptions of the history between Natives and European settlers. This section begins with a general discussion of this trend and then engages in a detailed analysis of two specific murals.

The reliance on archival photographs as source materials affects the mural paintings significantly, especially how viewers interpret them. Contemporary Western culture has a relationship with photographs stemming from their use in photojournalism and as evidence in legal cases in which they are assigned a strong truth value (Sturken & Cartwright, 2009). People assume that a photograph does not lie, can prove things, captures details, and serves as a record in ways that other artistic forms do not. So despite the growing ability for digital alteration and the abuse of the relationship between photography and truth, people still put significant belief in the idea that photographs do not lie.

A second way that using photographs as the murals' source material affects viewers' perceptions is specific to Native North Americans. The photography of Edward S. Curtis and his 20-volume project focusing on the North American Indian have been highly influential in shaping popular public perceptions of Indigenous people of North America. The project was conceived as a photographic record of a "vanishing" race and the traditions of various tribes. The scope of his artistic work is stunning, but critics have questioned his historical accuracy and ethnographic

methods because he often manipulated subjects to wear traditional dress out of context and removed details of modern life that had already become part of their everyday existence (Lippard, 1993). Critics also point to Curtis's use of soft focus, sepia tone, lowered gazes, and romanticized settings, which contributed to the problematic popular perception of the "noble demise" of Native tribes (Beck, 2001; Ponce, 2000). The visual similarities between the mural art and Curtis's photographs position the mural art in what Beck (2001) calls a nostalgic market for an almost extinct civilization.

Because all the murals are a glance back at bygone days, many have been portrayed with a certain amount of nostalgia. As artist Ernest Marza said, the murals tell a story and a history, but "more romantic, like a dream—it's the past." Indeed, in my interviews, even the way the artists spoke about their involvement was with nostalgia because many participated over 20 years ago, and this has an effect on the representational practices. Several murals present a romanticized version of past relations and frontier town life, one that soothes over tensions between different cultural groups and releases modern viewers from the guilt of confronting the realities of the hostile takeover of the land.

The images in several murals subtly support a relationship of domination and exploitation of First Nations peoples by Europeans. As Stupples (2003) explains,

> The visual has been used by all social groups in all societies as the more-often-than-not unconscious medium of choice for the representation of a cultural ideological spectacle, creating a sense of both inclusion within a community of adherents and of exclusion from the company of Others. (p. 129)

Walshe (2002), who studied photographs by First Nations artists, added to this claim: "The association of aboriginal people with

certain signs of cultural identity has occurred in large part because of historical nonnative narratives of First Nations peoples and their cultures as vanishing during the late nineteenth and early twentieth centuries" (p. 37). Such images reflect a colonial gaze, characterized by portraiture of Indigenous peoples in traditional dress or connected intimately to the natural landscape. This has the effect of fixing or freezing popular cultural perceptions about different tribal groups to past representations and modes of living, ignoring contemporary cultural practices. Walshe's analysis of contemporary First Nations artists shows that their work challenges colonial depictions of Native peoples collectively as part of an ethnographic present engaged in traditional cultural activities. So although all the people portrayed in the murals are shown in the historical period around the time of White settlement in Chemainus (which began in the late 1850s), the consequences of presenting these images are different for Native people than they are for members of the dominant cultural group.

Stupples's (2003) and Walshe's (2002) claims can enlighten analysis of the mural images in Chemainus in two ways. First, the images in these murals illustrate a colonial gaze toward the activities of the local Indigenous peoples in the past. Second, if First Nation painters had had the opportunity to portray their own groups and cultures, they may have done so in ways that would have differed from the stereotypical tropes that define *Indianness* in these images. As Rayna Green (2001) explained, Native artists have "quite often used their art as a weapon in the national point–counterpoint conversation about identity so characterized by the objects (and performances of identity) that have defined and confined them" (p. 34). The cumulative function of these images from the Chemainus Mural Project is to maintain a "Native" heritage in the region from a Eurocentric perspective and present versions of the historical relationship between Natives and European settlers that gloss over past injustices.

Native Heritage (Figure 1) is the largest mural in the Chemainus Mural Project (at 50 × 20 feet). Painted in 1983, when interest in the mural project was gaining acceptance and momentum, this mural stands out because of its size and prominent location at the corner of Mill Street, with a park in front of the artwork. It is easily visible to car traffic, and a path curves through the corner lot, with benches for sitting that invite viewers to approach the mural.

The artist, Paul Ygartua, a resident of Vancouver, British Columbia (born in northern England of Basque heritage), is well known for his paintings of Indigenous peoples in different locations. This mural is a large collage that incorporates portraits and figures in a thematic composition. A dozen bands of Cowichan people, who were part of the Coast Salish language group, occupied the Chemainus and Cowichan valleys for hundreds of years before Europeans settled in the area. The mural guidebook explains that these people developed the rich heritage and superb artistic traditions that are still maintained by the descendants of these first people, who continue to live in and around Chemainus. The intention for the mural was to offer a prominent place in the local history to Indigenous peoples and their ways of life, but only two other murals (and, later, one sculpture) include depictions of Indigenous figures.

The title of the mural, *Native Heritage,* speaks to its intended meanings, reinforced by its composition. The figures in the composition are juxtaposed in contrasting size to the other elements in the artwork. Three large human heads dominate the composition, arranged closely together in the center of a horizontal rectangle; the heads are further emphasized by their central location, arranged in a slight V shape, and their deeper colors. The gazes of the figures are a mix of direct and averted gazes, which is important in establishing an imaginary relationship between the viewers and those depicted—what Kress and van Leeuwan (1999) called *demands* (direct eye contact) and *offers* (oblique views that are a

FIGURE 1. *Native Heritage* (1983), artist Paul Ygartua, Mill Street and Chemainus Road.

more subtle invitation). The expressions of the faces are uniformly stoic, fitting the stereotypical image of First Nations peoples. The stern expressions and direct gazes demand respect from the viewer, though the exclusive focus on the heads offers up the likenesses as "representative" examples, rather than portraits of whole individuals, and certainly not as members of a sovereign nation. The system of gazes created in this mural participates in an exoticized fascination with the "Other," as described in hooks's (1999) work on race and representation, in which she argues that there is intense curiosity and fascination among White people to experience Black culture.

The central figures are balanced with smaller figures and natural settings to the left and right of the heads, rendered with less vibrant colors, with paintings of carved totem poles framing the ends. This symmetry is reinforced by the repetition of a V shape over the heads, and the combination of this and the totems at the edges serves to bring the viewer's eye back to the central figures. The painting, now somewhat faded because of sun exposure, is limited to colors found in the surrounding natural landscape, especially

black, warm brown, and some green and blue surrounded with white; this color palette is reminiscent of the sepia tones used in Curtis's famous photographs. The paintings of the carved totems and the wooden poles in the center of the composition reinforce a Eurocentric view of Native artistry and act as an antique freeze-frame for the portraits of First Nations people.[4]

The fascination hooks identified is also reflected in the fact that this mural is one of the best known and most reproduced images from Chemainus. Its likeness is reproduced on FOM billboards along the Trans-Canada highway that runs the length of Vancouver Island; it has been printed on posters, blankets, key chains, and magnets; and it serves as cover art on a video about the murals. Its striking size and images reproduce well and seem to have worked to bring people to see more of the murals. As one community member and FOM board member put it, "It remains a bit of a PR theme" (Fergus Anderson, personal communication, April 14, 2002).

I witnessed the popularity of this mural firsthand when I was in Chemainus. Among the throngs of tourists photographing the mural, I witnessed First Nations families having their picture taken in front of the mural on several occasions. This initially led me to believe that the mural is popular among the Indigenous peoples as well as other Canadians and visitors, perhaps serving as a source of pride for those people who were being photographed there. However, my conversations with Indigenous studies scholars cautioned me about interpreting these actions uniformly as pride, suggesting that though Indigenous people do desire representation, they are also likely to interpret such images in many ways, including receiving them with humor and sarcasm. This suggests that the images in this mural may function in different ways for cultural insiders than they do for cultural outsiders.

My original in-depth interviews for this study included only the mural artists, mural program administrators, and local residents, and in this case, there were no Native people among that group. I

did travel to the nearby town of Duncan, "City of Totems," which features a wealth of First Nations carvings and a Native Artists Collective, and there I had the chance to speak informally with a Native man who worked at the Cowichan Art Center (an Indigenous heritage center). We talked at some length about Native artisans and the murals. In his view as a First Nations person, he did not relate to the murals; in particular, he did not identify with the images in *Native Heritage* because he thought they represented Inuit people, not his people, the Cowichan Valley Indians, and were therefore not reflective of him in any way. He was much more proud of the kind of art and craftsmanship that they have in the Cowichan Art Center, including work done by his own cousins. Identification with cultural representations is closely connected to positive identity formation, as demonstrated by communitarian theorist Charles Taylor (2003), who noted that "the condition of a viable political identity is that people must actually be able to relate to it, to find themselves reflected in it" (p. 23). Though *Native Heritage* was designed explicitly to celebrate the identities of First Nations peoples in the region, at least one local First Nations man found the images unrelatable, suggesting that for him, the mural was unsuccessful because it conflated all First Nations people rather than representing accurately the specific character of the people who live in the region.

Located directly across the street from *Native Heritage* is *Julia Askew—First Child of European Ancestry Born in the Chemainus Valley* (Figure 2), which shows four renderings of the same woman at various ages in her life. The words on the mural, "First white child born in Chemainus," instruct viewers as to what is important about her. The fact that this event is commemorated as significant endorses the notion that history begins with White settlement. I never witnessed anyone being photographed in front of this mural as I did with *Native Heritage.* A few community members I interviewed said they felt embarrassed by it, some because it neglected

the Native perspective and others because of the discomfort involved in being reminded of colonization. As one European Canadian community member put it, "I'd like to know who the first Native child was!"; another said, "There's a few [murals] that don't seem terribly politically correct to my sensitive palate." These comments reveal that even members of the dominant culture were sometimes dissatisfied in the ways they were represented.

Sandy Clark also painted a portrait of William Ishmael (Billy) Thomas (Figure 3), the first male child of European ancestry born in Chemainus, in 1874, who lived to be 102 years old and was a much-loved character in the town. This mural does not use words to convey this distinction; instead, his name reads below his portrait as an older man. This mural is informally known around town as "the Chemaniac," something the tour guides also say as they point to the mural, a combination of the words *Chemainus* and *maniac.* This both promotes the idea that he was the original resident and patriarch who defined the creation of the original town and its personality during his long life span and racializes the perception of locals as predominantly White European Canadians.

Also painted in 1983, the sixth mural, *The Arrival of "Reindeer" in Horseshoe Bay* (Figure 4), is located centrally in downtown on an unobstructed cinder block wall. At 25 × 13 feet, this is one of the project's larger murals, and the location affords up-close viewing for both pedestrian and car traffic. Sandy Clark, the primary artist for this work, went on to paint and sculpt two more pieces for the project. When I interviewed her in Chemainus, she shared that her interest in art has always centered around representations of the human figure, particularly women.

A thin black border surrounds the artwork and frames the content. There are two main objects balanced on the left and the right side of the rectangular composition and set in a landscape of clear blue sky, rocky shore and wood line, and calm ocean water in a bay. On the left side is a figure of a First Nations woman, shown

FIGURE 2. *Julia Askew, First Child of European Ancestry Born in the Chemainus Valley* (1986), artist Elizabeth Smily, Mill Street.

wearing a traditional cloak of cedar bark and looking toward the right side of the frame, in which the sloop *Her Majesty's Reindeer* is pictured in the water of the bay. According to the historical archives, the ship's commander was Captain A. E. Kennedy, who was an acquaintance of Isabel and Thomas George Askew, founders of Chemainus and mill owners. The ship made regular stops in Chemainus Bay, historically called Horseshoe Bay. The figure and ship are rendered in contrasting colors to the background of the natural panorama, placing the visual emphasis on them.

Each of the main elements of the composition can be recognized through symbols and color usage. The figure is recognizable as an Indigenous person mainly in two ways: she has the traditional long, dark hair of the First Nations peoples of the area, and she is wearing an intricately beautiful and luminescent cedar bark cloak, historically characteristic of local bands. Her stance is tall and proud; indeed, Clark wished her to appear "strong." This reinscribes

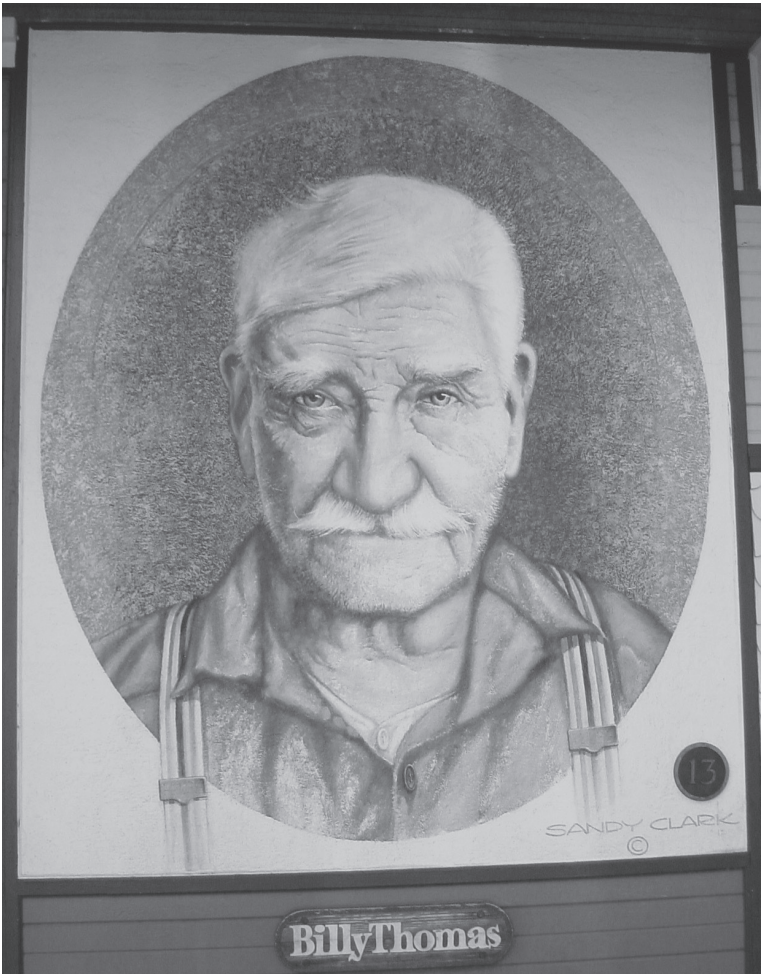

FIGURE 3. *Billy* (1984), artist Sandy Clark, Willow Street.

popular, stereotypical social understandings of Native peoples as proud, stoic, and robust. Her figure is grounded on the rocky land, which has a dual reference: that her people were the original inhabitants of the island and that their culture was rooted in the natural world around them. The use of red and orange colors to cloak her figure is also a symbolic reference to skin color of Native

FIGURE 4. *The Arrival of the "Reindeer" in Horseshoe Bay* (1983), artists Sandy Clark and Lee Goward, Mill Street.

peoples, commonly referred to as "red." The ship can likewise be understood symbolically. The white of the sails is both an accurate historical detail of the fabric and an invocation of the "White Man" who came to the region. The details of its architecture are accurate for a European-style ship, and European colonizers used the sea to assist with controlling and developing the region. The geometric and human-made shapes of the boat stand in contrast to the natural world in the background.

Because viewers observe this narrative from the side and without a direct gaze from the figure, onlookers can observe the story from a comfortable distance. The frame around the picture also offers the viewer the sense that this scene, frozen in time like a photograph, is a significant event. The story conveys an idealized version of the relationship between the island's original inhabitants and European settlers that contrasts sharply with Olsen's (1963/1981) history, which chronicles a host of tensions and incidences of violence between the groups from the very first contact: "In the early

summer of 1791 the Cowichan Indians met the first white men, and blood was shed in the first few minutes of that meeting" (p. 8). To reformulate the local history of contact between the Indigenous peoples and European settlers in this way can radically influence public perception about this ongoing intercultural relationship, both for locals and international visitors, erasing the truth of colonial takeover and assuaging guilt.

Unlike for most Chemainus murals, artist Sandy Clark got to play a role in determining the artistic content of *The Arrival of "Reindeer" in Horseshoe Bay.* In our interview, she said, "Karl [Schutz] was in control [at that time] and he knew what he wanted. He came down to Victoria and asked if I would do it." He brought a drafting board with archival photos, all of ships, and the only figures were men. Clark said, "Unknown to himself, he was terribly sexist!" She told Schutz that there had to be a woman in her mural, in a strong pose, and that she wanted to peruse the archives for images. He told her there were no images of women. But, she noted, "I dig up one of the princess," and she knew it was what she wanted. Initially Schutz refused but later told her he would "make an exception."

Clark and all the materials printed about the mural refer to the figure as a "princess," a title denoting European royal lineage. As many scholars have demonstrated, using the designation "princess" in this way reinforces stereotypical portrayals of Indian women in media such as Pocahontas. Scholar Rayna Green (1990) pointed out that North Americans have had what she terms a *Pocahontas perplex* for centuries: "The powerfully symbolic Indian woman, as Queen and Princess, has been with us since 1575 when she appeared to stand for the New World. Artists, explorers, writers, and political leaders found the Indian as they cast about for some symbol with which to identify this earthly, frightening, and beautiful paradise" (p. 16). Male Indians are more often depicted as savages, but Western notions of femininity required the female Indian to be understood as noble and nurturing. The figure of Pocahontas,

who willingly provided a welcome and aid to White men, rose to exalted status as a "princess."

Including the Native figure altered the possible meanings for the mural, the first one to portray any woman in the Chemainus series. Clark included a female figure to which she could relate, and though the woman is not referenced in the title of the mural, including her creates a story to accompany the rendering of the ship. She is portrayed with her gaze toward the approaching sloop, creating a vector that implies a narrative structure. Her rootedness on the bluff classifies her with the land, while the ship is connected to the sea and other locales. In contemplating the arrival of the ship, her expression is firm but neutral; she neither openly welcomes the ship nor clearly disapproves of it. Their comparative balance in size and position in the frame suggests a relatively equal balance of power, though the fact that the figure is slightly higher than the ship implies that she was there first and the ship entered afterward. They face each other neutrally, suggesting a vision about a relationship between the Indigenous peoples and the European settlers that is in relative harmony and balance.

The title of the work is also important to consider. Called *The Arrival of the "Reindeer" in Horseshoe Bay,* which was the event that Schutz wanted to depict originally, the reference is to the ship bringing technology and industry to the region by European settlers. Clark's addition of the First Nations figure makes the story a different one; however, the figure is presented in a way that is common to representations of marginalized or oppressed group members by dominant artists, characterized by omission and negative representation. In this case, the Indigenous woman is not named in the title nor described as an individual in the promotional materials about the mural but is instead read through the European figure of the "Indian Princess." In addition, when the ship's moniker is *Her Majesty's Reindeer,* labeling the Salish woman as a "princess" rewrites her story so that it fits into the discourses of

European culture and puts her on more equal footing with them. The power to name or label others remains with the dominant culture.

In addition, this mural was one to which at least two of the artists referred to as beautiful, a descriptive term I did not hear often in reference to the other Chemainus artwork. Because the murals act as an archive of historical events, objects, and people, it is the individual artist's rendering that each mural more romantic aesthetic attributes. This mural acts as a feminization of a historical moment in the development of Vancouver Island, reinserting a woman's presence alongside a documented event and making it palatable to viewers in a way the true history could not. As Martin and Nakayama (2009) explained, mainstream histories have neither time nor space to include all ethnic or racial histories, particularly if the stories of different cultural groups serve to question or undermine the celebratory nature of the national history. *The Arrival of the "Reindeer" in Horseshoe Bay* uses artistic conventions to attach feminine beauty to the depiction of a past event, erasing the violence of the historical encounter and turning it into an illustration in a fairy tale. The mural makes the princess into a character who possesses exalted status yet whose fate is determined by outsiders who invade or conquer the kingdom.

In another case, both the stories told by guides and the mural images themselves contribute to ethnic and racial stereotypes. *The HMS Forward* (Figure 5) is a seemingly tranquil depiction of a Royal Navy gunboat in an inlet across from small Native figures with canoes, painted in a style reflective of European romantic painting. There is a story attached to this mural that the artist used to guide the work, though there is nothing in the mural to explain the account. Renowned maritime artist Harry Heine described the mural:

> This is all from the Chemainus history. This one was based on when some Natives here got into trouble with the law and were being hidden in this Native village on one of the islands

FIGURE 5. *HMS Forward* (1984), artist Harry Heine, RSMA, FCA, CSMA, Mill Street.

> by Chemainus. They killed a shopkeeper, I think it was. And so they sent the British warship in to arrest the Natives, and so I just sort of sketched the whole thing. (personal communication, April 14, 2002)

Heine had the photograph of the ship but created the scene himself from his own understanding of the incident. Even though this back story is not represented on or around the mural, the tour guides and guidebooks all chronicle the incident behind the picture, explaining that the gunboat HMS *Forward* was one of four such Royal Navy vessels dispatched during the search for the murderers of William Brady and the Marks family in April 1863. An entire chapter in Olsen's (1963/1981) history, titled "Bloodshed and Bitterness," describes the event, in which Lamalchi Indians allegedly committed a "massacre" of William Brady and a family named Marks. A chief of the band, who was reported to have boasted of killing 11 White men, was thought to be hiding the killers. Four gunboats shot at the coastal Indian settlements. The navy later found the murderers (a husband and wife) in a search and claimed that the accused boasted about committing other murders of Whites. When this violent story overlays the mural, the seemingly tranquil scene must be interpreted as something more dark and serious. The portrayal of the relationship between the Indigenous and the European settlers in Olsen's story may be a more accurate representation of the

tensions in the relationship between the Indigenous peoples and the Europeans since they invaded the island.

When I took the mural tour and later spoke with the artist, I found the story behind the mural disturbing and intriguing. The narrative related in the mural itself is not overtly accusatory; there is no mention of murderers in the title or bloodshed portrayed in the scene, unlike in Olsen's story. Although Olsen's story may be based on an historical event, what it brought to mind for me is the way that negative and sensational stories about "others" are often repeated in public forums so that ascriptions of negative characteristics to members of marginalized groups become accepted as part of modern dominant discourses about them and serve as justification for past acts of imperialism and colonialism (van Dijk, Ting-Toomey, Smitherman, & Troutman, 1997). After hearing enough stories or seeing news coverage that repeatedly points to suspects from certain ethnic backgrounds, the idea that this is "how they are" becomes naturalized and ascribes negative stereotypes to the members of those ethnic groups. As Hall (1997) explained, representational practices contribute directly to the creation of racial stereotypes. Discourses about racial difference in society are often created through representations of binary opposites such as the opposition between (White) "civilization" and (racialized other) "savagery" (Hall, 1997, p. 243). In particular, stereotypes tend to have the most representational power in situations in which gross inequalities of power exist, enacted by dominant group members through an ethnocentric lens. In the case of the back story to the HMS *Forward,* one violent act committed by Indigenous people is sensationalized, while scores of other, often more violent crimes enacted by White settlers remain hidden. The narratives offered by tour guides and guidebooks couch a historical account in an appealing picture so that the effect on viewers is to accept this story as an important piece of information about the history of Vancouver Island and its inhabitants, one that reinforces negative stereotypes.

AUDIENCE RECEPTION OF THE MURALS

According to the FOM Society, the average tourist stop in Chemainus is two to three hours, and merchants feel lucky if people leave the Trans-Canada highway to visit. Most of the shops and eateries offer convenient locations and services for these short-term visitors. This encourages people to have a touristic view of the town and of its murals. One artist said, "I think the murals have done their job, and I think people enjoy seeing the history of a town visually rather than sitting down and reading the book for hours and hours. I think the locals enjoy it as much as the tourists love it" (Earnest Manza, personal communication, August 6, 2002). People accept the historical narratives without complicating or questioning them over lunch and shopping.

At the beginning, artist Harry Heine claimed, the problem Karl Schutz had was selling "art" to the locals. Schutz said that it took over 10 years to get his program accepted, though he was sure it would succeed. Once production on the murals began, not all the residents were happy with what they saw. Their perception was that local money was being given to the artists, who were outsiders, though their ideas about the amount of money paid to the artists were overestimated. Heine said, "The citizens might have been a little ticked off that the artists were making this money. But we did those murals very, very cheaply. I think a lot of the artists did it just for the sense of adventure." Despite initial resistance, marketing the mural painting itself as a tourist attraction helped to change attitudes of community members. He explained it to me in the following way:

> When we worked on the downtown revitalization itself, the principal aspects of building new sidewalks and storefronts and all that, and that was no big deal. But as soon as the artists started, that's when people, quote, "started to gather." That's when

> groups of two, three, four, five people stopped and watched. And they phoned other friends of theirs not living in Chemainus or even living in Chemainus, saying, "You've got to see what those crazy people are doing down here. . . ." And, of course, that's exactly what we wanted them to do. (personal communication, April 14, 2002)

As Schutz indicated, the FOM was a uniquely successful strategy for attracting tourists. Occurring during the warm summer months and well advertised, the festival featured artists out painting and working on their scaffolding, where tourists and locals could interact with them. As one of the artists, Constance Manning, said in an interview (August 8, 2002), "It was extraordinary. I mean, you were talking to thousands a day, thousands of people a day . . . and I found that the kinds of questions people ask were so interesting." She would sometimes paint up on the second-floor scaffolding and have her husband down on the ground answering questions, which was helpful so that she could paint and not spend all her time talking.

Frank Lewis, the painter of the first two murals of the Chemainus project in 1982, told me that for his initial work, he received "a wall of resentment" and even had locals throw empty beer cans at him on the scaffolding. But eventually the locals warmed to the art, and 10 years later, in 1992, Lewis was asked to come back and repaint his original mural because the wall had cracked. He said that the workers on the nearby docks and people who passed his mural every day had come to love it and wanted "their" mural back. So Lewis believed he was acknowledged 10 years later for his original work. A few of the artists warmed to the town so much that they relocated and became permanent residents. The shift in attitude demonstrates how locals came to accept and embrace the murals as part of their habitus.

Emmison and Smith (2000) reminded readers that embodied habitus may exist as a mode of domination. Assumptions about

ownership of space, whether liminal or concrete, always carry implications of power. A sense of being at ease and enacting a comfortable posture reflects status in a given location, expresses ownership of that space, and can make others feel unwelcome. Depictions of people can serve to create habitus, serving as welcoming or warning symbols to community residents and visitors. I can attest to this both through personal experience and through observation. In Chemainus, I observed First Nations peoples looking at the murals and having their pictures taken in front of *Native Heritage,* but I never saw them enter any of the downtown establishments frequented by other tourists and locals. When I entered the shops or restaurants, I was always asked, though not unkindly, where I was from and what I was doing there, because in such a small town, my presence as an unknown person was marked. As Lippard (1997) stated,

> Art that is in place, or on site, can create a different (not necessarily better) relationship between the viewer and the place. It too frames, but in collaboration with the place itself, and with the looker, both of which are always changing. (p. 20)

This relationship is further complicated by the community residents' dependency on tourists to keep the economy of tourism viable.

As the town struggles to invent novel ways to attract tourists, aspects of the program continue to keep community members invested and interested in the identity of the original "muraltown," continually reinforcing a comfortable habitus for the residents. One community FOM board member, Ellen Bootsma, explains how the art needs to sustain the town and its children:

> The people here are special. And the aspect of the people who have moved here, you get part of it in your blood of the "little town that did." They realize what can be accomplished since

> the one mill closed down, and what can be accomplished in the future. And the children in the town are special because there is not much for them to do—we are a tourist town, so everything is seasonal—so the children of the town are the most important aspect. People that are here usually are born here, live here, raised here, and they want to stay here. So to do that, you have to work with them and make sure that they get into things that are important to the town, so they can make a living also. (personal communication, April 13, 2002)

She works with the schoolchildren, who annually paint a series of bright yellow footsteps leading visitors along the path to see the murals. They also paint public trash cans and utility boxes to contribute to the overall beautification of Chemainus and the draw for tourism.

Since the original Muraltown in Chemainus, other small towns have used the same strategy (such as Saint Thomas–Elgin, Ontario, Canada, and Lake Placid, Florida), and in some cases, the same artists who participated in Chemainus were asked to contribute to other mural projects. Some felt this took away from the originality and uniqueness of Chemainus. A few of the artists were critical of Karl Schutz, who packaged and marketed this model of production to more than 60 other mural projects internationally. Artist Sandy Clark described the process to me:

> They didn't just develop by themselves; they were sold. The material was taken and sold. You look on in terms of free enterprise, but people here did not appreciate that this whole project was put together to have established a contract outlining it like a lot of corporations do and sold to their competitors, but they didn't know. They didn't know at the time that it could have that kind of impact, and it has diminished [the impact of Chemainus]. We are still lucky enough, I think, and a lot of communities

> have told me this, that they still look at Chemainus as number one, they still look here for inspiration, but we're not the biggest anymore. (personal communication, August 8, 2002)

Though most feel that Schutz was the originator of the idea and should receive credit as such, they are less enthusiastic about the personal profits he now makes as a salesperson, marketer of the program, and consultant to other cities. The novelty of the "mural-town" idea has faded, forcing the town to consider new and different strategies to maintain popularity and stimulate new tourism and growth, such as hosting the 2012 Global Mural Conference, which focused on economic development of tourism through the arts.

In my short visits to the island, I had little opportunity to speak with First Nations people to gain their perspectives about the mural art, which is a limitation in this study. The lack of comment or critique from Native people in the printed materials suggests that their voices have largely not been included. One story that Schutz related to me also suggested that not all First Nations people feel content with the images in the murals or their exclusion from the production process. He described a moment about 10 years into the program:

> One of those young Native people, they accused me of "using," in quotation marks, the Native people, which is totally ridiculous. I mean, then we used the Chinese, and we used the Europeans, and the Scots and the Irish, and we used everybody. I mean, this was, it was just not, not valid. But he maintained that the spirit has to be pleased and they made a big blessing? . . . or whatever it was, and set everything straight.

Schutz felt that he made an effort to protect the mural-making process from racism and to seek participation from Indigenous artists, but at the same time, his comments are dismissive of the

concerns of this individual's interests, and he does not appear knowledgeable about the cultural practices of the local tribes. The fact that some First Nations people seem to feel interest and pride in the murals, while others are clearly upset about them, points to the importance of using both interpretive and critical perspectives as epistemological lenses to form understandings of audience reception. Today, when Schutz consults with other mural towns, he encourages them to present a history specifically designed to encourage visitors by avoiding representation of explicitly political or religious content to avoid controversy (Fleming, 2007). The resistance to addressing history in complex ways or to acknowledging Native people's real struggles works against the emancipatory potential of the murals.

It is clear that the depictions of local histories have helped to secure the economic future of Chemainus, a novel and site-specific strategy to allow a small town to gain a foothold in the global economic network. But this economic security is partially built on the selling of colonial images. Though locals had little say in the choice of depictions, with Schutz and the FOM Board serving as gatekeepers and editors, they use both the artwork and stories of their production to create a contemporary identity for themselves. This identity is communicated to hundreds of thousands of tourists each year, internationally spreading a regional historical perspective that is a piece of the ongoing national historical narrative. The version of history that has been produced seems to be accepted and makes some residents feel good about their past and future, but it most certainly is not inclusive of all people. Stupples (2003) explained how images create or deny inclusivity:

> Images that become internalized as cultural memories, when they become naturalized, implanted as "indigenous" memories, act as instruments of cohesive identity. That sense of cohesion may be exercised both positively to give individuals a sense of

> belonging and cultural affiliation, to bring groups together for collective endeavor, as well as negatively to exclude, to bracket out the Other. (p. 127)

The Chemainus mural project works to create a positive identity for the residents of the town at the same time that it excludes the Indigenous Other.

IMPLICATIONS

The history of Chemainus is a small piece of the larger national identity of Canada, and Becker (2002) said, "One could argue that the well being of a democracy is in part manifested by how openly representations of its own complexity are embraced" (p. 36). My purpose in critiquing the Chemainus murals is not to say that the art is "bad" or that it should be removed but to demonstrate that when mural images are commodified and only their economic value is considered in production, the social consequences can contribute to discourses of marginalization and exploitation.

Elsewhere I have argued that murals can offer images of resistance for marginalized groups and act as touchstones for cultural identity negotiation (Moss, 2010). Though I am critical of the images of the Indigenous people in Chemainus, the mural program has been successful in presenting other aspects of intersecting ethnic histories. While the limited space in this essay did not allow me to address it fully, in my analysis of other murals in Chemainus depicting Canadians of Chinese and Japanese descent, I found that the artwork more effectively integrates historical photographs and different artistic styles as well as personal and ethnic group narratives, and production included artists from a range of ethnic backgrounds. These disparities can act as an important lens through which to view ethnic relations in Chemainus.

The Chemainus murals are not the only example of controversy

over mural depictions of Native people in British Columbia (Ingram, 2000; Seixas & Clark, 2004). Following protests over murals in the central rotunda of the British Columbian Legislative Buildings, Seixas and Clark (2004) explored students' ideas about the dilemma of what to do with depictions of the origins of civilization in British Columbia in essays they wrote. For me, the study by Seixas and Clark highlighted how art in public spaces can be used to create dialogue, to educate and complicate understandings of history from multiple perspectives.

My hope is that my study will encourage mural scholars to think more critically about the visual rhetoric produced in public artworks. Grassroots mural projects and murals that emphasize ethnic pride are often assumed to support a more liberal perspective, but the leadership and economic interests that are served in many cases are likely to support the dominant culture and status quo. Because the life span and audience for public art are extensive, public art installations can continue to be important sites for intercultural dialogue, as Seixas and Clark's (2004) study has demonstrated.

Communitarian theorist Charles Taylor (2003) explained that a major dilemma facing democratic societies is a temptation to exclude, to create a common identity around a rigid formula of politics and citizenship that does not allow room for those whose identities cannot or will not fit easily with the majority. But this exclusion runs counter to the foundational notions of democracy. His answer is the idea of sharing what he terms *identity space*. A key component of sharing identity space is that symbols and representations of various peoples must exist in the public sphere, with their significance to be negotiated there. Though Taylor does not offer concrete descriptions of identity spaces, I believe public mural art offers one possible venue for this negotiation.

Drzewiecka's (2001) research applied Bourdieu's notion of habitus to show how ethnic groups can develop a sense of identity through an embodied sense of location, which is more about a liminal

identity space than an actual concrete location. To find signs in your spoken language, shops with food and goods with which you are familiar, and to see other people whose dress and physical comportment are recognizable creates internal schemes or structures for managing the world. As I have demonstrated here, the large impact of mural images in Chemainus may have the effect of creating a sense of welcome for some and a hostile environment for others.

Artistic forms of communication offer opportunities for community engagement that may address intercultural conflicts and issues. Becker (2002) explained it as follows:

> It is our challenge, those of us within cultural and educational institutions, to try to help articulate a series of collective projects for the species, in which artists and intellectuals can participate, having goals like organizing against rampant global conservatism, increased visual and conceptual illiteracy, growing political apathy, the degradation of the environment. (p. 29)

Arts policy makers and program directors act as important cultural authorities, and in Chemainus, presenting a colonial historical narrative to throngs of domestic and international visitors cannot help but create unintended consequences. Lewis (1990) provided an example of some potential side effects of public art initiatives:

> The use of culture to promote economic activity is . . . a dangerous weapon. Using cultural facilities to promote tourism and attract businesses means promoting just the sort of prestigious culture aimed at high-income groups. . . . These art forms appeal to people on high disposable incomes, people who run businesses, and who make the most lucrative tourists. This may be fine as an economic strategy, but as a cultural policy it is regressive and socially limited. (p. 138)

The arts can act as a vehicle for democracy when they are treated as an aesthetic experience and opportunity for dialogue rather than as a commodity. In particular, commodified images of Native people work to perpetuate their exploitation. The case of Chemainus reminds us that when the process of artistic production is not inclusive and diverse and the aesthetics reinforce a dominant, colonial perspective, there is greater potential for exclusion and marginalization.

AUTHOR'S NOTE: The author wishes to thank her study participants, Dr. Amy Lonetree, her colleagues at the Lewis and Clark Scholarly Writing retreat, Dr. Heather Crandall, and the anonymous reviewers for their contributions to the manuscript.

NOTES

1 The official contemporary label for the Indigenous peoples of Canada is "First Nations," reflective of their sovereignty. Alongside this term I also use the labels "Indigenous" and "Native," which are part of the accepted everyday and academic lexicon. I consciously capitalize these terms when speaking of cultural group members in recognition of their sovereign status.

2 E.g., my undergraduate training in the canon of Western European art history has a direct influence on my reading of images, including an understanding of formal artistic academic conventions. I also acknowledge my position as an outsider to the community that I am studying and my privileged status as a member of the dominant culture. Though I make strong claims about the effects of ethnic stereotyping in the discourses of national identity and development, I am not attempting to speak for Indigenous people.

3 All photographs taken by the author.

4 The central figure is Clay-sa-luke, a former Chemainus band chief. The likeness on the left is Ce-who-latza, who was a chief of the Lyakun Village on Shingle Point, Valdez Island, and a constable of the Native Police as well as a pilot for the Royal Navy. The face on the right is an unspecified Salish woman. Flanking the large heads are general representations of Indigenous figures fishing and in a typical Native fishing village, while in the upper right is a smaller portrait of a local First Nations woman, Mrs. Mary Rice.

REFERENCES

Beck, D. (2001). *The myth of the vanishing race*. http://memory.loc.gov/ammem/award98/ienhtml/special.html

Becker, C. (2002). *Surpassing the spectacle: Global transformations and the changing politics of art.* Lanham, MD: Rowman and Littlefield.

Blandy, D., & Congdon, K. G. (Eds.). (1987). *Art in a democracy.* New York: Teacher's College Press.

Bunbury, C., & Perry, G. (1998). The inspiration of it all! In *The Chemainus murals: Festival of murals* (pp. 3–5). Chemainus, BC: Chemainus Festival of Murals Society.

Chemainus Festival of Murals Society. (2012). *Chemainus world famous murals*. Retrieved from http://www.muraltown.com/

Collier, M. J. (2005). Theorizing cultural identifications: Critical updates and continuing evolution. In W. B. Gudykunst (Ed.), *Theorizing about intercultural communication* (pp. 235–256). Thousand Oaks, CA: Sage.

Collier, M. J., Hegde, R., Lee, W., Nakayama, T., & Yep, G. (2002). Dialogue on the edges: Ferment in communication and culture. In M. J. Collier (Ed.), *(Inter)national/cultural communication: Critical transformative directions: International and intercultural communication annual* (pp. 219–280). Newbury Park, CA: Sage.

Drzewiecka, J. (2001). Discursive construction of differences: Ethnic immigrant identities and distinctions. In M. J. Collier (Ed.), *International and intercultural communication annual: Constituting cultural difference through discourse* (Vol. 23, pp. 241–270). Thousand Oaks, CA: Sage.

Drzewiecka, J., & Nakayama, T. (1998). City sites: Urban space and the communication of identity. *Southern Communication Journal, 64*(1), 20–31.

Emmison, M., & Smith, P. (2000). *Researching the visual: Images, objects, contexts, and interactions in social and critical inquiry.* London: Sage.

Fleming, R. L. (2007). *The art of placemaking: Interpreting community through public art and urban design.* London: Merrell

Foss, S. K. (1988). Judy Chicago's *The Dinner Party*: Empowering of women's voice in visual art. In B. Bate & A. Taylor (Eds.), *Women communicating: Studies of women's talk* (pp. 9–26). Norwood, NJ: Ablex.

Foucault, M. (1990). *The history of sexuality: An introduction* (Vol. 1, R. Hurley, Trans.). New York: Vintage Books.

Gallagher, V. J., & LaWare, M. (2007). The power of agency: Urban com-

munication and the rhetoric of public art. In G. Burd, S. J. Drucker, & G. Gumpert (Eds.), *The urban communication reader* (pp. 161–179). London: Merrel.

Gillis, J. R. (Ed.). (1994). *Commemorations: The politics of national identity.* Princeton, NJ: Princeton University Press.

Green, R. (1990). The Pocahontas perplex: The image of Indian women in American culture. In E. C. DuBois & V. L. Ruiz (Eds.), *Unequal sisters: A multicultural reader in U.S. women's history* (pp. 15–21). New York: Routledge.

Green, R. (2001). Native artistic resistance to Western curio-sity. *Journal of the West, 40*(4), 34–42.

Hall, S. (1996). Who needs "identity"? In S. Hall & P. du Gay (Eds.), *Questions of cultural identity* (pp. 1–17). London: Sage.

Hall, S. (Ed.). (1997). *Representation: Cultural representations and signifying practices.* London: Sage.

Herman, D., Jahn, M., & Ryan, M. (Eds.). (2005). *Routledge encyclopedia of narrative theory.* New York: Routledge.

hooks, b. (1996). *Art on my mind: Visual politics.* New York: New Press.

hooks, b. (1999). *Black looks: Race and representation.* Cambridge, MA: South End Press.

Ingram, G. B. (2000). *Contests over social memory in waterfront Vancouver: Historical editing and obfuscation through public art*. http://www.victoria.ac.nz/home/research/publications/researchpub-08.pdf

Jensen, J. (2002). *Is art good for us? Beliefs about high culture in American life.* Lanham, MD: Rowman and Littlefield.

Kress, G., & van Leeuwan, T. (1999). Representation and interaction: Designing the position of the viewer. In A. Jaworski & N. Coupland (Eds.), *The discourse reader* (pp. 362–384). London: Routledge.

LaWare, M. (1998). Encountering visions of Aztlan: Arguments for ethnic pride, community activism and cultural revitalization in Chicano murals. *Journal of Argumentation and Advocacy, 34*, 140–153.

Lewis, J. (1990). *Art, culture, and enterprise: The politics of art and the cultural industries.* London: Routledge.

Lippard, L. (Ed.). (1993). *Partial recall: Essays on photographs of Native North Americans.* New York: New Press.

Lippard, L. (1997). *The lure of the local: Senses of place in a multicentered society.* New York: New Press.

Lippard, L. (2000a). *Mixed blessings: New art in a multicultural America.* New York: New Press.

Lippard, L. (2000b). *On the beaten track: Tourism, art, and place.* New York: New Press.

Martin, J., & Nakayama, T. (2009). *Intercultural communication in contexts* (5th ed.). New York: McGraw-Hill.

Mendoza, S. L., Halualani, R. T., & Drzewiecka, J. (2002). Moving the discourse on identities in intercultural communication. *Communication Quarterly, 50*, 312–327.

Miles, M. (1989). *Art for public places: Critical essays.* Winchester, UK: Winchester School of Art Press.

Moss, K. (2010). Cultural representations in Philadelphia murals: Images of resistance and sites of identity negotiation. *Western Journal of Communication, 74*(4), 372–395.

Odenhall, J. (2003). Embodied views to the visual through interdisciplinary and reflexive methodologies. *Text and Performance Quarterly, 23*(1), 87–104.

Olsen, W. H. (1981). *Water over the wheel: A story of danger, mystery, heartbreak, and success in the Chemainus Valley.* Chemainus, ON: Chemainus Crofton and District Chamber of Commerce. (Original work published 1963)

Olson, L., Finnegan, C., & Hope, D. (2008). *Visual rhetoric: A reader in communication and American culture.* Thousand Oaks, CA: Sage.

Ponce, P. (2000). The imperfect eye of Edward Curtis. *Humanities, 21*(3). http//www.neh.gov/news/humanities/2000-05/Curtis.htm

Rose, G. (2001). *Visual methodologies: An introduction to the interpretation of visual materials.* London: Sage.

Seixas, P., & Clark, P. (2004). Murals as monuments: Students' ideas about depictions of civilization in British Columbia. *American Journal of Education, 110*, 146–171.

Selwood, S. (1995). *The benefits of public art: The polemics of permanent art in public places.* London: Policy Studies Institute.

Stupples, P. (2003). Visual culture, synthetic memory, and the construction of national identity. *Third Text, 17*(2), 127–139.

Sturken, M., & Cartwright, L. (2009). *Practices of looking: An introduction to visual culture* (2nd ed.). Oxford: Oxford University Press.

Taylor, C. (2003). No democracy, no community. *The Responsive Community, 14*(1), 17–27.

van Dijk, T., Ting-Toomey, S., Smitherman, G., & Troutman, D. (1997). Discourse, ethnicity, culture, and racism. In T. van Dijk (Ed.), *Discourse as social interaction: Discourse studies: A multidisciplinary introduction* (Vol. 2, pp. 144–180). Thousand Oaks, CA: Sage.

Walshe, A. N. (2002). Visualizing histories: Experiences of space and place in photographs by Greg Staats and Jeffrey Thomas. *Visual Studies, 17*(1), 37–51.

Affinity Through Instant Messaging

JASON P. GREBE AND JEFFREY A. HALL

University of Kansas

This article explores affinity seeking, testing, and signaling in initial interactions of opposite-sex strangers using instant messaging. Sixty dyads ($N = 120$) interacted for 20 min, and participants identified when they showed liking and when they perceived their partner showing liking in the interaction transcript. Participants also reported overall liking for and the perception of being liked by their conversation partners on a survey instrument. The results indicate that participants who perceived more liking in the text and accurately decoded messages of liking from their partners believed their conversational partners liked them more. Participants who perceived more disliking messages in the text liked their conversational partners less and believed their partners liked them less as well. Six dyadic analyses using structural equation modeling demonstrated that effects of affinity seeking, testing, and signaling were moderated by participant sex. For women, sending messages of disliking, perceiving messages of disliking, and accurate decoding of disliking were associated with overall liking of their male conversational partners. The implications of interpreting affinity messages in the formation of online relationships are discussed.

KEYWORDS: Affinity, liking, impression formation, instant messaging, dyadic analysis

When meeting someone new, an individual decides how much he or she likes the other person and attempts to determine whether that liking is shared (Dindia & Timmerman, 2003). This process is often identified as *affinity seeking* (Bell & Daly, 1984). The present study explores how affinity is signaled, perceived, and detected during an initial interaction through instant messaging (IM) between two opposite-sex strangers. The purpose of this study is to determine

Jason P. Grebe, M.A., is an independent researcher at the Oshkosh Corporation. Jeffrey A. Hall, Ph.D., is an assistant professor in Communication Studies, University of Kansas. He can be reached at Communication Studies, University of Kansas, Bailey Hall, 1440 Jayhawk Boulevard, Room 102, Lawrence, KS 66045 or at hallj@ku.edu.

the relationship between overall liking of the conversational partner and three types of affinity found in the text of an IM interaction: showing liking toward conversation partners (i.e., affinity seeking), perceptions of liking shown by conversation partners (i.e., *affinity signaling*), and the ability to accurately detect liking when it is shown by conversation partners (i.e., *affinity testing*). Because the communication of affinity is crucial for forming and advancing relationships, it is important to examine affinity in IM, a popular computer-mediated communication (CMC) application (Ramirez & Broneck, 2009).

Although this study is concerned with exploring the ways affinity seeking, affinity testing, and affinity signaling are related to overall liking, the increasing integration of Internet technology into everyday life requires further attention to relationship initiation online (Bakardijieva & Smith, 2001). Despite the increasing use of IM in both forming and maintaining relationships (Ramirez & Broneck, 2009; Valkenburg & Peter, 2009), few studies have explored how affinity is sought, tested, and signaled during CMC generally and in IM specifically. Although not all online relationship initiation attempts are successful, some individuals are able to initiate and develop intimate relationships solely through online interaction (Gibbs, Ellison, & Heino, 2006). Sending and interpreting verbal messages conveying affinity are necessary skills in all interpersonal relationships (Dindia & Timmerman, 2003) but are particularly important when using lean text-based media to initiate new relationships. In developing a better understanding of how text-based message production and interpretation affect overall liking for a conversation partner, this study offers insight into relationship initiation using IM. Finally, this study will also explore which features of IM text are related to overall liking of and perceived liking by conversation partners.

INSTANT MESSAGING

IM is a synchronous Internet application that allows users to have conversations with other users who are online at the same time. Typically, IM is a one-on-one interaction between users who are not co-present, but communicators in the same room can use IM as well. The use of IM is prevalent, and it is continually growing (Schneider & Hemmer, 2006). Although e-mail is used more often overall, IM is used more than e-mail for personal messages (Ramirez, Dimmick, Feaster, & Lin, 2008), and longitudinal data have confirmed that IM use is positively related to friendship quality (Valkenburg & Peter, 2009). CMC that allows users to be anonymous, such as IM, is also more likely to be used when users attempt to learn information about new people (Westerman, van der Heide, Klein, & Walther, 2008). IM allows users to learn about others in private, which sets it apart from other text-based CMC applications such as message boards. IM is often used in a first interpersonal encounter not only because of anonymity but also because of the personal nature of IM—the feeling of having a one-on-one conversation (Slatcher, Vazire, & Pennebaker, 2008).

Despite the broad and growing use of IM, there are several limitations of the medium. IM allows for the expression of few nonverbal behaviors, excepting silence and chronemics; feedback is not instantaneous; and natural language is altered (Baron, 2008). However, social information processing theory (Walther & Burgoon, 1992) and the hyperpersonal model (Walther, 1996) suggest that relationships initiated through CMC can develop intimacy like face-to-face (FtF) relationships, but they require careful crafting and interpreting of messages. This suggests that when using text-based applications like IM during relationship initiation, message construction is of the utmost importance (Walther, 1996). This article will explore whether four aspects of IM text are associated with liking a new conversational partner.

During initial FtF interactions, disclosing information about oneself and asking questions about one's partner lead to more liking (Afifi & Lucas, 2008). One meta-analysis concluded that individuals tend to like those who disclose to them and disclose more to those they like (Collins & Miller, 1994). During CMC interactions, asking questions is particularly associated with more self-disclosure and liking (Schouten, Valkenburg, & Antheunis, 2007). The rate of disclosure may also affect liking. Because it conveys social responsiveness—an active interest in what the other person is saying—the time elapsed between messages sent might influence liking inversely (i.e., less time indicates more liking; Fehr, 2008). Finally, conversing about multiple topics is likely to build affinity because it communicates social responsiveness and adds breadth to the conversation (Fehr, 2008). To clarify, we offer the first hypothesis:

H1: (a) The number of messages sent, (b) the number of questions asked, (c) the less time between messages, and (d) the number of topics covered will predict liking a conversational partner; and (e) the number of messages sent, (f) the number of questions asked, (g) the less time between messages, and (h) the number of topics covered will predict the perception of being liked by a conversational partner.

AFFINITY

When using IM to initiate a relationship, individuals must carefully choose words and formulate appropriate and engaging responses to show liking and to be liked. This process, identified as *affinity,* has been explored extensively in FtF interactions (Bachman & Zakahi, 2000; Martin & Rubin, 1998; Richmond, Gorham, & Furio, 1987; Tolhuizen, 1989). Past research on FtF communication has identified three important components of the process of building

affinity: affinity seeking, affinity signaling, and affinity testing. Affinity-seeking messages are meant to communicate "I like you" (Bell & Daly, 1984). Although affinity-seeking strategies intend to show liking toward another person, the use of such strategies does not guarantee liking being reciprocated. The second concept, affinity signaling, is also called *target response* (Bell & Daly, 1984). Affinity signaling occurs when one perceives that one's partner has sent a message of liking. Messages that signal affinity are perceived to say "you like me." Finally, affinity testing is the intentional use of communicative behaviors to confirm partner liking (Douglas, 1987, 1990). When communicators believe their partners like them, the goal of affinity testing is to accurately determine whether this is true.

Past research on affinity has generated lists of potential strategies that a communicator might use to seek, signal, and test affinity (Bell & Daly, 1984; Douglas, 1987). However, coding IM transcripts for the presence of affinity strategies may be problematic. Part of the difficulty lies in deciphering communicators' intent. Affinity-seeking strategies intend to show liking, but for outside observers to correctly label them as such is challenging; that is, observers determining which messages seek affinity would likely lead to errors due to the difficulty of determining message intent (Bavelas, 1990). Second, messages can serve multiple affinity purposes at the same time. For example, if one types the message "I love the Beatles! How about you?" during IM, it is difficult to say whether one is seeking affinity by naming a band liked by many people, testing affinity by hoping for agreement, or signaling affinity by enthusiastically answering a prior question. Finally, the strategies identified in past research commonly used to test affinity in FtF interactions may not be applicable to IM interactions. Prompting responses, waiting for the other person to send a message, and asking questions all fit the definition of affinity testing according to Douglas's (1987) inventory of strategies. During IM, those are also the primary means of carrying on a conversation. An observer

identifying strategies as affinity testing would lead to many false positives. Therefore, it is not the purpose of this study to identify and classify specific affinity strategies used during IM by employing past affinity strategy rubrics; rather, this study will attempt to combine IM transcripts and communicator and partner data to test whether affinity seeking, affinity signaling, and affinity testing influence the amount of liking experienced by communicators.

Affinity in Instant Messaging

Each of the three affinity strategies is predicted to be related to overall liking felt and overall liking perceived. By definition, the number of messages that participants identify as affinity seeking should predict liking the other person (Bell & Daly, 1984); that is, the number of messages intended to communicate "I like you" should be related to liking another person. Affinity seeking should also be related to the perception of being liked by a conversational partner. The perception of being liked by another person is strongly related to liking that person in return (Sprecher & Felmlee, 2008); that is, we express liking to those we believe like us. Similarly, more messages that show disliking are negatively related to liking and the perception of being liked by a conversational partner (Kellermann, 1984). Therefore we arrive at the following hypotheses:

H2: The frequency of affinity-seeking messages will positively predict (a) liking a conversational partner and (b) the perception of being liked by the conversational partner.

H3: The frequency of disliking messages will negatively predict (a) liking a conversational partner and (b) the perception of being liked by the conversational partner.

Affinity signaling is also likely to predict liking the partner and perceived liking from the partner. In believing one is liked, liking is reciprocated (Fehr, 2008; Sprecher & Felmlee, 2008). Therefore the

perception that a conversational partner has sent many messages of liking will increase liking overall. For example, if John believes that Susan frequently says "I like you, John" in the way she communicates, then John will probably like Susan more. Conversely, the perception of more disliking messages sent will negatively predict liking the partner and perceived liking from the partner. In summary, we offer the following hypotheses:

H4: The frequency of messages from a conversational partner perceived to show liking will positively predict (a) liking a conversational partner and (b) the perception of being liked by the conversational partner.

H5: The frequency of messages from a conversational partner perceived to show disliking will negatively predict (a) liking a conversational partner and (b) the perception of being liked by the conversational partner.

Affinity testing will be measured by participants' accuracy in detecting liking and disliking from a conversational partner. Douglas (1987) suggested that the purpose of affinity testing is to experience more liking. By definition, in accurately decoding a message of liking, participants are more likely to perceive liking from the message sender. For example, if John believes that Susan's comment "you are soooo funny" is evidence of her liking him, and Susan also intended that comment to indicate liking, then a successful affinity test has occurred. The more successful tests of affinity will likely build rapport—both in the sense of liking someone and in the sense of believing that person likes us in return (Douglas, 1987). Conversely, accurately decoding messages of disliking will decrease liking of that person. For example, if John accurately believes that Susan is saying "I don't like you" when she sarcastically comments, "Yeah right, genius," then John will like Susan less and perceive that she likes him less too. Therefore we offer the following hypotheses:

H6: The accuracy of interpreting messages of liking from a conversational partner will positively predict (a) liking a conversational partner and (b) the perception of being liked by the conversational partner.

H7: The accuracy of interpreting messages of disliking from a conversational partner will negatively predict (a) liking a conversational partner and (b) the perception of being liked by the conversational partner.

Partner Effects

When collecting dyadic data from conversational partners, partner effects can be tested (Kenny, Kashy, & Cook, 2006). Partner effects occur when the behavior of one partner (e.g., affinity seeking) directly affects the other partner (e.g., liking), after accounting for the lack of independence of a dyad. This is different from the participants' perception of liking by their partners in that partners' actual reported liking is predicted. Partner effects can determine whether affinity seeking by one person is related to increases in liking from one's partner. By analyzing these data using dyadic analyses, the preceding hypotheses can be replicated to explore partner effects in affinity strategies. Without guidance from prior research on partner effects in affinity, we offer the following research question:

RQ: What partner effects will predict liking and the perception of being liked?

METHOD

Participants

Participants were undergraduate students at a large midwestern university who were offered partial course credit or extra credit for participation (N = 120). Sixty men and 60 women participated (M_{age} = 19.8 years, SD = 3.31; range, 18–50). Seventy-five

participants (62%) were single, and 45 were in a relationship (38%). Most participants reported being heterosexual (88.7%, $N = 107$), and 13 reported being homosexual or bisexual (11.3%).

Procedure

Male and female participants signed up for 1-hour time blocks on different online enrollment pages to ensure that one man and one woman were signed up for each time slot and to conceal the identities of interacting participants. When participants arrived, they were led to separate rooms. Participants were consented and completed a user profile sheet to simulate an online profile. Once finished, these profiles were exchanged between participants by the researcher. The two participants then chatted for 20 minutes using IM, which was installed on computers in separate rooms. They were instructed to "get to know one another and find out if you would interact with this person again." After 20 minutes, participants logged off, completed a survey that measured liking, and identified affinity and disaffiliation messages in the printed IM transcript.

Measures

Four characteristics of the transcript text were coded. The number of messages was measured by counting the number of messages each participant sent. All messages were counted, including when participants sent two messages that were part of one sentence. The number of questions asked was measured by counting the number of messages stated in the form of a question. The number of topics covered was measured by identifying each unique general topic that was brought up in the transcript. For example, talking about two different bands was considered a single general topic (i.e., music). Topics that were left and returned to were not counted twice. Finally, time between messages sent was measured by measuring the time between a message sent and the previous message sent by

the same participant. These times were then totaled and divided by the number of messages sent to get the rate of communication. Both study authors coded the number of questions and topics, and high intercoder reliability was found ($\kappa = .94$).

Liking toward the partner and perceived liking by the partner. These were measured using six-item, 7-point Likert-type scales modified from McCroskey and McCain's (1974) Social Attractiveness Scale (e.g., "I like him/her," "I believe he/she really enjoyed talking to me," "I do not have positive feelings towards him/her" reverse coded). The scales showed acceptable reliability (liking $\alpha = .70$; perceived liking $\alpha = .71$) and were averaged ($M_{\text{liking}} = 5.24$, $SD = .82$; $M_{\text{perceived}} = 5.06$; $SD = .80$).

Liking and disliking shown and perceived in the text. To remedy the challenges inherent to coding the three affinity concepts in IM, participants were asked when they showed liking and when they perceived liking being shown by conversational partners by identifying each on an IM transcript. After their 20-minute interaction, participants received a copy of the transcript and determined when they showed liking and disliking and when their partners showed liking and disliking using highlighters of different colors to show each of the four behaviors (i.e., self liking, self disliking, partner liking, partner disliking). For example, participants used a yellow highlighter to identify any message where they showed liking toward their conversational partners. Messages that sought affinity were those that participants identified as intended to show liking. Although this procedure required participants to retroactively assign intent, the method was likely to result in fewer errors than observers interpreting the intent of communicators. Affinity signaling is the perception of liking being conveyed by a conversational partner. This study measured affinity signaling by requiring participants to identify messages sent by conversational partners that were perceived to show liking.

Accuracy. When individuals are able to correctly identify a

partner's message as showing liking, then a successful affinity test has occurred. Therefore an accuracy measure was needed to measure affinity testing. Because self-report and partner perception data were available from both participants, messages that were intended to show liking by one person and the perceptions of those same messages by the interaction partner were compared. This yielded a measure of accuracy that captured a successful test of affinity. Participants' highlighted transcripts were compared with participants' partners' transcripts. Accuracy was calculated so that Person A's accuracy was the number of messages correctly perceived as liking (as determined by Person B's report) divided by the number of total messages Person A perceived as liking plus the total number of messages Person B reported as liking ($A_c/(A_t + B_t)$). Therefore accuracy was reduced for both false-positive and false-negative perceptions.

RESULTS

On average, participants sent 43.69 messages (*SD* = 20.80), asked 9.39 questions (*SD* = 5.12), and discussed 8.65 topics (*SD* = 2.74) in 20 minutes. Participants highlighted messages showing liking and disliking and messages perceived as showing liking and disliking on IM transcripts. The mean frequency of showing liking was 6.05 times in 20 minutes (*SD* = 4.96), and the mean frequency of messages perceived as liking from a partner was 6.20 times in 20 minutes (*SD* = 4.74). Disliking shown and disliking perceived from a partner were relatively low in frequency at fewer than one message in 20 minutes for each (M_{shown} = .52, *SD* = 1.46; $M_{\text{perceived}}$ = .73; *SD* = 1.35). The mean accuracy in decoding liking messages (i.e., agreement between perceived liking and liking shown) indicated that participants were correct in their assessments 18.2% of the time (*SD* = .15). The mean accuracy of participants for detecting disliking was 6.9% (*SD* = .20).

Regression Results

To test the study hypotheses, two regression analyses were conducted in blocks. The first block explored whether relationship status (1.00 = in a relationship), age, IM use frequency, sexuality (1.00 = heterosexual), and sex (1.00 = female) were predictors of liking the conversation partner and the perception of being liked by the partner. The second block contained the four text-based measures (i.e., messages sent, questions asked, topics covered, mean time between messages). The third block contained the measures of affinity and disaffinity shown (i.e., affinity seeking) and affinity and disaffinity perceived (i.e., affinity signaling). The fourth block included the accuracy of the affinity measure (i.e., affinity testing). The fifth block included disaffiliation accuracy, which was reserved for the final block because only 53 participants showed disliking, and therefore disaffiliation could have been detected accurately for 53 participants.

The first regression tested hypotheses that predicted that text features and affinity messages would influence overall liking of a partner. The results suggest that features of the text (H1a–H1d) and affinity-seeking messages (H2a and H3a) were unrelated to overall liking. H4a predicted that perception of liking messages shown by the conversational partner would predict overall liking, but this was not supported. H5a predicted that the perception of disliking shown by partners would negatively predict liking and was supported, $\beta = -.31$, $p < .01$. Participants' perception of the frequency of messages signaling dislike predicted participants' overall liking of their partners. H6a predicted that accuracy in detecting liking would positively predict liking, but this was not supported. Finally, H7a predicted that accurately detecting disliking would decrease liking the conversational partner. Although this relationship approached significance, H7a was not supported (see Table 1, overleaf).

The second regression explored whether the same variables were related to the perception of being liked by the partner. The results

indicated that features of the text (H1e–H1h) and affinity-seeking messages (H2b and H3b) were unrelated to the perception of being liked. However, both affinity-signaling hypotheses were supported. The number of liking messages perceived in the text positively predicted the perception of being liked, $\beta = .30$, $p < .05$ (H4b), and the number of disliking messages perceived negatively predicted the perception of being liked, $\beta = -.31$, $p < .01$ (H5b). Results support H6b in that accurately decoding messages of liking was related to the perception of being liked, $\beta = .27$, $p < .01$. However, the accuracy in detecting disliking did not predict the perception of being liked, indicating a lack of support for H7b (see Table 1).

In summary, participants liked their partners more when they perceived fewer messages of dislike (H5a). Additionally, participants believed their partners liked them more when they perceived more messages of liking sent (H4b) and fewer messages of disliking sent (H5b). They also believed their partners liked them more when they accurately interpreted messages of liking from their partners (H6b). No other hypothesis was supported.

DYADIC ANALYSES

When data are collected from both partners in a relationship, partners' responses are related. In this study, affinity messages in the text and liking are dependent on one another and cannot be assumed to be independent (Kenny et al., 2006). As Kenny and colleagues recommended for distinguishable dyads, structural equation modeling (SEM) and the actor–partner independence model (APIM) estimated the impact of affinity seeking, affinity testing, and affinity signaling on participants' own liking (actor effect) and on partners' liking (partner effect). To create an APIM for distinguishable dyads (Kenny et al., 2006), the effects of affinity on liking for male participants were estimated separately from the effects of affinity for female participants. By allowing the error

Table 1. *Multiple Regression Standardized Beta Weights for Liking Outcomes*

	Liking of partner			Partner liking		
Variable	**β**	***SE***	***R*²**	**β**	***SE***	***R*²**
Relationship status[a]	−0.07	0.17		0	0.16	
Age (years)	−0.11	−0.03		−0.1	0.02	
IM use frequency[b]	0.13	0.05		0.13	0.05	
Sexuality[c]	−0.04	0.25		−0.12	0.24	
Sex[d]	−0.08	0.17	0.032	−0.08	0.16	0.045
Messages sent	−0.3	0.01		0.1	0.01	
Questions asked	−0.14	0.02		−0.08	0.02	
Topics covered	0.06	0.04		0.12	0.04	
Mean time between messages (s)	−0.26	0.01	0.037	0.09	0.01	0.022

I showed liking frequency	−0.03	0.02		0.02	0.02	
Perceived liking frequency	0.16	0.03		0.30*	0.02	
I showed dislike frequency	0.03	0.07		0.01	0.07	
Perceived dislike frequency	−0.31**	0.08	0.067**	−0.31**	0.07	.154**
Accuracy of perceived liking	0.12	0.48	0.01	0.27**	0.45	.07**
Accuracy of perceived dislike[e]	−0.23*	0.61	0.03	−0.05	0.6	0

Note. $N = 120$.
[a]1.00 = in relationship. [b]1 = never; 2 = once per week; 3 = many times per week; 4 = daily; 5 = more than once per day; 6 = many times per day.
[c]1.00 = heterosexual. [d]1.00 = female. [e]$N = 53$.
*$p < .10$. **$p < .01$.

terms of the dependent variables (i.e., male and female overall liking) to be correlated with one another, the APIM accounts for shared variance on the dependent variable. This procedure allows researchers to estimate the effects of independent variables (i.e., affinity) on dependent variables (i.e., liking), accounting for the nonindependence of samples.

Each of the APIMs estimated all actor and partner effects for all affinity behaviors (i.e., a saturated SEM model). After estimates were found for men and women, an additional test was used to determine whether the effects of affinity shown in the text on overall liking differed by sex. As Kenny et al. (2006) recommended, when significant effects were identified for both men and women, they were fixed to be equivalent using SEM. If model fit was unchanged, as determined by a chi-square test, $p < .01$, then the paths were considered equivalent. If the model fit was worsened, paths were considered different, and sex differences were reported.

Liking Partners

The first APIM explored the effect of showing liking and showing disliking (i.e., affinity seeking) on liking a partner. Results indicate two actor effects and one partner effect. The first actor effect demonstrates that when women show more liking, women report liking male conversational partners more, $\beta = .04$, $SE = .02$, $p < .05$ (H2a). The second actor effect indicates that when women show more disliking in the text, women report liking male conversational partners less, $\beta = -.10$, $SE = .06$, $p < .05$ (H3a). The partner effect demonstrates that when men show more disliking, women report liking men less, $\beta = -.26$, $SE = .12$, $p < .05$ (RQ1).

The second APIM explored the effects of perceiving liking and perceiving disliking (i.e., affinity signaling) on liking a partner. The results indicate one actor effect and one partner effect. The actor effect demonstrates that when women perceive more disliking in the text, women like male conversational partners less, $\beta = -.19$,

SE = .06, $p < .001$ (H5a). This replicates regression results. The partner effect suggests that when women perceive more disliking in the text, men like female conversational partners less, $\beta = -.12$, *SE* = .07, $p < .05$ (RQ1). This partner effect shows that disliking communicated by the sender is related to disliking perceived by the receiver. The third APIM explored the effects of accurately decoding liking and disliking (i.e., affinity testing) on liking a partner. Results indicate only one actor effect: When women accurately interpret men's disliking in the text, they like male partners less, $\beta = -4.09$, *SE* = .80, $p < .001$ (H2b).

Perceiving Being Liked by Partners

The fourth, fifth, and sixth APIM analyses explored a different dependent variable: the perception of being liked. The fourth APIM explored the effect of showing liking and showing disliking (i.e., affinity seeking) on the perception of being liked. Results indicate one actor effect: When women show more disliking messages in the text, women perceive male interaction partners as liking them less, $\beta = -.13$, *SE* = .06, $p < .05$ (H3b).

The fifth APIM analysis explored the effect of perceiving liking and perceiving disliking in the text (i.e., affinity signaling) on the perception of being liked. Results indicate three actor effects and no partner effects. The first two actor effects demonstrate the same effect for men and women: When individuals perceive more liking by their partners, they believe that their partners like them more (for women, $\beta = .05$, *SE* = .02, $p < .01$; for men, $\beta = .04$, *SE* = .02, $p < .05$; H4b). This replicates regression results. To test for sex differences, a chi-square test was conducted. When paths are fixed to be equivalent, the model fit is worsened significantly, $\chi^2 = 9.30$, $df = 2$, $p < .01$. This effect is stronger for women than for men. The third actor effect demonstrates that when women perceive more disliking by men in the text, women perceive men as liking them less, $\beta = -.13$, *SE* = .06, $p < .001$ (H5b). This replicates regression results.

The sixth APIM explored the effects of affinity testing (i.e., accuracy) on the perception of being liked. The results indicate three actor effects and no partner effects. The first two actor effects demonstrate the same effect for men and women: When individuals accurately interpret their partners' messages of liking in the text, they believe their partners like them more (for women, $\beta = 1.55$, $SE = .62$, $p < .05$; for men, $\beta = 1.16$, $SE = .67$, $p < .05$; H6b). This replicates regression results. To test for sex differences, a chi-square difference test was conducted. When paths are fixed to be equivalent, the model fit is unchanged, $\chi^2 = 4.59$, $df = 2$, $p = ns$. This effect is equivalent for both men and women. The third actor effect demonstrated that if women accurately decode men's signs of disliking in the text, women perceive that their male conversational partners like them less, $\beta = -1.91$, $SE = .86$, $p < .05$ (H7b).

Post Hoc Analysis

Given the strong evidence of participant sex moderating the effects of affinity on overall liking and perceived liking, six independent-samples *t*-tests were conducted to explore sex differences in affinity. No sex differences were found. There was no difference in frequency of liking shown between men ($M = 6.53$, $SD = 5.37$) and women ($M = 5.57$, $SD = 4.49$), $t(106) = .87$, $p = .39$. There was no difference between men ($M = 6.35$, $SD = 4.87$) and women ($M = 6.05$, $SD = 4.81$) in perceived liking frequency, $t(106) = .32$, $p = .75$. There was no difference between men ($M = .37$, $SD = .85$) and women ($M = .61$, $SD = 1.93$) regarding shown disliking frequency, $t(106) = -.82$, $p = .41$. There was no difference between men ($M = .63$, $SD = 1.08$) and women ($M = .81$, $SD = 1.63$) for perceived disliking frequency, $t(106) = -.67$, $p = .51$. Men were accurate 18.8% ($SD = .15$) of the time and women were accurate 17.6% ($SD = .15$) of the time in their assessments of liking shown by their partners, but this difference was not significant, $t(106) = .44$, $p = .66$. Men were accurate 10.3% ($SD = .23$) of the time and women were accurate

3.9% (SD = .14) of the time regarding disliking, but this difference was not significant, $t(51) = 1.14$, $p = .26$.

DISCUSSION

This study extended research on affinity seeking, affinity testing, and affinity signaling by introducing a new method for measuring affinity in a popular CMC medium. Results suggest that all three affinity processes are related to overall feelings of liking toward an interaction partner and to the perception of being liked by that partner. Overall, affinity signaling (i.e., messages that say "you like me") was particularly predictive of liking felt and of perceived liking; that is, when more messages of liking and fewer messages of disliking in IM text are perceived from interaction partners, individuals are more likely to develop affinity with their partners. Additionally, accurately decoding messages of liking from IM interaction partners is consistently associated with stronger feelings of liking for the partners. The dyadic analyses demonstrate that other relationships are moderated by participant sex, particularly the effects of sending, perceiving, and decoding disliking. The affinity processes and an interpretation of the dyadic analyses are discussed subsequently.

Affinity Processes

It was predicted that more messages showing liking and fewer messages showing disliking sent through IM would be associated with overall feelings of liking and perceptions of being liked by a conversation partner. The regressions demonstrated no support of any of these hypotheses (H2a and H2b, H3a and H3b). Dyadic analyses revealed, however, that this relationship was moderated by participant sex. The lack of support for H2a, H2b, H3a, and H3b for the total sample demonstrated by the regression analysis suggests that the effects were so weak for men as to attenuate the effects

of affinity seeking on liking overall. SEM analyses demonstrated that women show more liking in the IM text messages when they like their conversational partners and show more disliking in the messages when they dislike their conversational partners. Similarly, women show more disliking when they believe their partners disliked them. In the context of IM, messages of disaffiliation may be more important for women in comparison to men when forming impressions.

Affinity signaling, or target response, was conceptualized as perceiving liking in messages sent by a partner. Unlike affinity seeking, affinity signaling was a consistent and strong predictor of liking and the perception of being liked. Participants liked partners more when they perceived fewer messages of disliking (H5a). Participants believed their partners liked them when they detected more messages of liking in the text (H4b) and when they detected fewer messages of disliking (H5b). Results suggest that the interpretation of messages from others is a critical component of feeling affinity toward others and in forming impressions of being liked by others. This finding reinforces the idea that individuals' perceptions of the number of "you like me" messages are more important in feeling and perceiving liking than are their perceptions of the number of messages that say "I like you."

Affinity testing was conceptualized as accurately interpreting messages of liking and disliking in the IM text. Results from both regressions and dyadic analyses suggest that when individuals accurately decode messages of liking, they are more likely to believe their partners like them (H6a). Douglas (1987) suggested that individuals test the affinity of others to confirm and develop greater rapport. This study extends prior research by providing very clear evidence of successful affinity testing in a new context using a new measure of the concept. This study shows that accurate knowledge of messages of liking sent by another person helps to build liking through certainty. People who are skilled at testing affinity are able

to accurately perceive others' affinity by interpreting IM text and therefore are more capable of better estimating partners' overall liking. Also, dyadic analyses suggest that women who accurately decode disliking in the text like their partners less and believe their partners like them less, a result not found for men. The importance of disaffiliation testing for women is discussed in more detail later.

Finally, in response to the sole research question, results from the dyadic analyses demonstrate two partner effects. The APIM exploring affinity seeking demonstrates that men who show more disliking have female partners who like them less. Similarly, women who perceive more messages indicating that their partners dislike them are more likely to have male partners who actually like them less. This study is the first to use the APIM statistical procedure to offer evidence of affinity seeking and affinity signaling in text generated by communication partners using a CMC medium. The results offer clear support for the strong effects of disaffiliation messages on partner response in CMC (Walther & D'Addario, 2001). These results demonstrate that showing dislike for a partner through IM directly affects the partner's responses. Taken in combination, these effects appear to be dependent on the sex of the sender and receiver. The results of this study demonstrate that when men communicate disliking in their construction of IM messages, women notice it and react according (i.e., negatively).

This study suggests that affinity signaling and affinity testing are more consistently related to building positive regard than is affinity seeking or merely showing liking. This supports claims that despite the 20-minute time period, feelings of affinity can develop and be accurately known through CMC (Walther & Burgoon, 1992). This process occurs, not because of strong messages of liking communicated, but because of an ability to accurately interpret messages of liking. Because the measures of accuracy are derived from indicators of liking as reported by both participants, there is strong evidence that decoding liking in a text-based exchange is an important part

of knowing the affinity of others using IM. In addition, results suggest that messages of disliking are also predictive of affinity, particularly for women, offering support for a phenomenon known in FtF impression formation as the negativity effect (Kellermann, 1984). Taken together, the lack of influence of showing liking (e.g., affinity seeking), and the strong effect of disaffiliation messages, can be explained in a consistent manner. During a first conversation with an opposite-sex person, individuals are especially polite and concerned with maintaining a positive face (Richmond et al., 1987). Therefore messages of disliking may be particularly potent in contrast with polite, positive scripts. Polite messages of liking are part of a script that is pleasant but not diagnostic of one's true feelings; following the friendly script is not indicative of actual liking felt or liking perceived.

Results suggest that defining affinity in the ways described in this study and using IM as a medium for interaction can produce new conclusions regarding the affinity process. Partner effects found in dyadic analyses are particularly revelatory in that they show direct evidence of how affinity behaviors of one partner in an IM conversation can lead to changes in liking in the other partner. These results, and the ability to operationally define affinity testing in terms of decoding accuracy, demonstrate that IM offers scholars a new context for researching the affinity process.

Sex Moderation

This study did not set out to explore sex differences in affinity messages, and post hoc *t*-tests demonstrated no sex differences in measures of affinity and accuracy. In addition, regression results indicate no sex differences in liking a conversational partner or in liking perceived from the partner. Furthermore, in comparison to men, women do not show liking more, do not perceive liking more, and are no more capable of detecting liking using IM. This is also not a consequence of participants' use of IM, relational status, or

sexual orientation (see Table 1). Nonetheless, sex was an important moderator in the relationships among affinity and liking. Seven of the actor effects and one of the partner effects were significant for women but not for men; that is, relationships between these behaviors and overall liking were stronger for women than for men. There are several possible explanations for these results.

Examining the results of affinity seeking, there appears to be a strong relationship between what women intend to convey in IM messages and how much they like their partners and how much they perceive that their partners like them. Results for affinity signaling are similarly moderated by participant sex. Women who perceive more disliking in their male partners' messages dislike their male partners more and perceive that their male partners are also feeling stronger dislike. This suggests that there is a strong relationship between what women perceive in the text and how they feel about their interaction partners as a whole. Additionally, women appear to be more sensitive to accurately decoded messages of disliking; that is, for women, greater accuracy in decoding negative messages was related to liking the partner less and perceiving being liked less. Because affinity testing is measured by comparing messages perceived to show dislike to messages intended to show dislike, these perceptions are in line with the reality of the interaction. Given the dyadic moderation results, it is clear that after men convey messages of dislike, accurate decoding by women plays a strong role in forming women's subsequent impressions. Although women are not more likely to accurately decode messages than men, decoding plays a stronger role in women's interpretations of overall liking. This is a new and unique finding in that although negative messages are more salient than positive messages in FtF (Kellermann, 1984) and CMC (Walther & D'Addario, 2001) interactions, women's heavy reliance on negative messages in forming impressions has not been shown in past research. The findings of the present analyses may imply that women exhibit greater relational sensitivity than men

to messages exchanged in online media, especially to messages of disaffiliation.

As an alternative explanation, consider these findings from the perspective of male participants. Men and women both utilize accurately decoded messages of liking when forming judgments about overall affinity. Therefore the results support the conclusion that men focus on positive messages when forming impressions and that women focus on both positive and negative messages. Although men are equally capable of accurately decoding messages of disliking, men may use some other information to form their judgments. Possibly men also use nondiagnostic indicators, such as messages sent or topics of conversation, to make their judgments about liking.

Overall, the results support two conclusions. First, in comparison to men, women's overall liking of conversational partners is strongly related to what they intend to communicate in text messages. Second, although both men and women use affinity signaling and affinity testing of positive messages when making judgments of overall liking, women are more likely than men to use messages that signal and test disliking when making judgments of overall liking.

LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

The laboratory context limits the external validity of this study. Participants in a zero-acquaintance situation, given a one-time opportunity to interact for 20 minutes, may not accurately represent affinity-related behaviors in natural settings. The laboratory may have also affected the predictive value of text-based features. Because participants had no other choice but to respond to one another while part of this study, response rates, questions, and topics covered may have not been as strongly related to liking as they would have been if individuals were in natural settings. The failure of any text-based features to predict liking may have oc-

curred because participants knew they would be participating for 20 minutes and communicated merely to follow instructions and fill up time rather than because of liking per se. If participants could have stopped communicating or continued to communicate for as long as they wished, questions asked and messages sent might have been predictive of liking.

Additionally, creating opposite-sex dyads allowed for sex-moderated dyadic analyses; future work should explore same-sex dyads and affinity. Will the moderation of effects due to sex appear when men and women interact in same-sex pairs, or are these results an artifact of this study's opposite-sex pairing? Perhaps women are particularly sensitive to messages of dislike because they are in a conversation with men but will not show similar sensitivity when talking with other women. Finally, the sample size may have limited power to detect small effects. This limitation was particularly challenging in that only 53 of 120 participants showed dislike. This reduced the *N* for calculations of disliking accuracy, which even further decreased the ability to identify small effects. Finally, participants may have acted in a socially desirable manner by increasing reports of positive messages sent and decreasing reports of negative messages sent. However, given the significant value of accuracy in predicting liking, we believe that this did not systematically distort the results.

Future work should explore the concept of affinity testing in relation to accurate textual interpretation. The predictive value of affinity testing in the present study offers promise for the future investigation of variability in the ability to accurately interpret liking by others who are not co-present. The growing use and importance of IM in initiating and maintaining long-distance relationships (Valkenburg & Peter, 2009) suggest that further study of affinity testing using the procedures outlined in this study may encourage the development of a line of research regarding text literacy or text sensitivity. Like nonverbal sensitivity, some individuals are more

capable than others of accurately interpreting text-based messages. As a consequence, more text-sensitive individuals should be capable of forming accurate judgments of the attitudes, emotions, and motivations of others by simply interpreting features of the text. Because the composition of text messages is an important part of impression formation in CMC, this concept of textual sensitivity may prove to be quite useful and informative in future work.

AUTHOR'S NOTE: A previous version of this manuscript was J.P.G.'s master's thesis under the direction of J.A.H. A previous version of this manuscript was presented at the annual conference of the National Communication Association in San Francisco.

REFERENCES

Afifi, W. A., & Lucas, A. A. (2008). Information seeking in the initial stages of relational development. In S. Sprecher, A. Wenzel, & J. Harvey (Eds.), *Handbook of relationship initiation* (pp. 135–151). New York: Psychology Press.

Bachman, G., & Zakahi, W. R. (2000). Adult attachment and strategic relational communication: Love schemas and affinity-seeking. *Communication Reports, 13*, 11–19.

Bakardjieva, M., & Smith, R. (2001). The Internet in everyday life. *New Media and Society, 3*, 67–83.

Baron, N. (2008). *Always on: Language in an online and mobile world.* New York: Oxford University Press.

Bavelas, J. B. (1990). Forum: Can one not communicate? Behaving and communicating: A reply to Motley. *Western Journal of Speech Communication, 54*, 593–602.

Bell, R. A., & Daly, J. A. (1984). The affinity-seeking function of communication. C*ommunication Monographs, 51*, 91–115.

Collins, N. L., & Miller, L. C. (1994). Self-disclosure and liking: A meta-analytic review. *Psychological Bulletin, 116*, 457–475.

Dindia, K., & Timmerman, L. (2003). Accomplishing romantic relationships. In J. O. Greene & B. R. Burleson (Eds.), *Handbook of communication and social interaction skills* (pp. 685–722). Mahwah, NJ: Erlbaum.

Douglas, W. (1987). Affinity testing in initial interactions. *Journal of Social and Personal Relationships, 4*, 3–15.

Douglas, W. (1990). Uncertainty, information-seeking, and liking dur-

ing initial interaction. *Western Journal of Speech Communication, 54*, 66–81.

Fehr, B. (2008). Friendship formation. In S. Sprecher, A. Wenzel, & J. Harvey (Eds.), *Handbook of relationship initiation* (pp. 29–54). New York: Psychology Press.

Gibbs, J. L., Ellison, N. B., & Heino, R. D. (2006). Self-presentation in online personals: The role of anticipated future interaction, self-disclosure, and perceived success in Internet dating. *Communication Research, 33*, 152–77.

Kellermann, K. (1984). The negativity effect and its implications for initial interaction. *Communication Monographs, 51*, 19–56.

Kenny, D. A., Kashy, D. A., & Cook, W. L. (2006). *Dyadic data analysis.* New York: Guilford Press.

Martin, M. M., & Rubin, R. B. (1998). Affinity-seeking in initial interactions. *Southern Communication Journal, 63*, 131–143.

McCroskey, J. C., & McCain, T. A. (1974). The measurement of interpersonal attraction. *Speech Monographs, 41*, 261–266.

Ramirez, A. R., & Broneck, K. (2009). "IM me": Instant messaging as relational maintenance and everyday communication. *Journal of Social and Personal Relationships, 26*, 291–314.

Ramirez, A. R., Dimmick, J., Feaster, J., & Lin, S. (2008). Revisiting interpersonal media competition: The gratification niches of instant messaging, email, and the telephone. *Communication Research, 35*, 529–547.

Richmond, V. P., Gorham, J. S., & Furio, B. J. (1987). Affinity-seeking communication in collegiate female–male relationships. *Communication Quarterly, 35*, 334–348.

Schneider, D., & Hemmer, K. (2006, May). *Telegraph lines in cyperspace? Identity, relationships, and group behavior in instant messaging communication.* Paper presented at the meeting of the International Communication Association, New York.

Schouten, A. P., Valkenburg, P. M., & Antheunis, P. J. (2007, May). *An experimental test of processes underlying self-disclosure in computer-mediated communication.* Paper presented at the meeting of the International Communication Association, San Francisco.

Slatcher, R. B., Vazire, S., & Pennebaker, J. W. (2008). Am "I" more important than "we"? Couples' word use in instant messages. *Personal Relationships, 15*, 407–424.

Sprecher, S., & Felmlee, D. (2008). Insider perspectives on attraction. In S. Sprecher, A. Wenzel, & J. Harvey (Eds.), *Handbook of relationship initiation* (pp. 297–313). New York: Psychology Press.

Tolhuizen, J. H. (1989). Affinity-seeking in developing relationships. *Communication Reports, 2*, 83–91.

Valkenburg, P. M., & Peter, J. (2009). The effects of instant messaging on the quality of adolescents' existing friendships: A longitudinal study. *Journal of Communication, 59*, 79–97.

Walther, J. B. (1996). Relational aspects of computer-mediated communication: Experimental observations over time. *Organization Science, 6*, 186–203.

Walther, J. B., & Burgoon, J. K. (1992). Relational communication in computer-mediated interaction. *Human Communication Research, 19*, 50–88.

Walther, J. B., & D'Addario, K. P. (2001). The impact of emoticons on message interpretation in computer-mediated communication. *Social Science Computer Review, 19*, 324–347.

Westerman, D., van der Heide, B., Klein, K. A., & Walther, J. B. (2008). How do people really seek information about others? Information seeking across Internet and traditional communication channels. *Journal of Computer-Mediated Communication, 13*, 751–767.

Community-Building Learning Groups in an Online Course: A Study of Functional Moves

TIMOTHY C. BALL AND ROZANNE LEPPINGTON
James Madison University

Online courses are becoming an increasingly popular method of college instruction, and instructors are facing the problem of moving face-to-face courses into online environments. Two models are emerging: massively open online courses and the smaller, "residential college" model. The study explored how a face-to-face human communication course moved online, fulfilled the learning objectives, developed a sense of community, and fostered collaborative group work by using active learning techniques in synchronous and asynchronous environments. The study describes how those problems were addressed and offers recommendations for creating online courses that build communities of learners and foster collaboration rather than emphasizing the delivery of content to thousands of individuals.

KEYWORDS: Online, pedagogy, community, collaboration, oral presentations, small groups

Online courses are becoming more popular with college students and more attractive to administrators. But what is the preferred model for online learning?

On May 2, 2012, the *New York Times* (Lewin, 2012) reported that Harvard University and the Massachusetts Institute of Technology had begun offering free *massively open online courses* (MOOCs). As many as 120,000 students had enrolled in a circuits and electronics

Timothy C. Ball, P.D., is an assistant professor at the School of Communication Studies, James Madison University. He can be reached at School of Communication Studies, James Madison University, Harrisonburg, VA 22807 or at balltc@jmu.edu. Rozanne Leppington, Ph.D., is an assistant professor at the School of Communication Studies, James Madison University.

course offered by this consortium. Sebastian Thrun at Stanford University made headlines in fall 2011 when 160,000 students signed up for his artificial intelligence course, and he has attracted more than 200,000 students to the six courses offered by his new company, Udacity. The online students will not get grades or credit from Stanford, but they will be ranked in comparison to the work of other online students and will receive a "statement of accomplishment" (Lewin, 2012).

In May 2012, Stanford University, Princeton University, the University of Pennsylvania, and the University of Michigan announced their partnership with a new commercial company, Coursera, with $16 million in venture capital (Lewin, 2012). Lawrence S. Bacow, past president of Tufts University and a member of the Harvard Corporation, said it remained unclear how traditional universities would integrate the new technologies. "Online education is here to stay, and it's only going to get better. . . . What's still missing is an online platform that gives faculty the capacity to customize the content of their own highly interactive courses" (Lewin, 2012, para. 14).

Bacow's quotation, however, raises a concern. Assuming he means that the courses that were once face-to-face and highly interactive now need to be customized for the online environment, this study explores what "highly interactive" online courses are. To do that, this article will explain how a hybrid human communication course with group presentations moved from a face-to-face environment to an online synchronous and asynchronous environment and how the instructors fulfilled the learning objectives while also developing a sense of community and fostering collaborative group work by using active learning techniques. The main proposition is that faculty and students can effectively use asynchronous and synchronous communication technologies to create self-directed learning communities, develop tasks that foster transactional collaboration, and promote active learning in an online course.

Comparisons have been made between online courses and their traditional face-to-face counterparts. Molesworth (2004) studied asynchronous discussions in an online marketing class. He suggested that students have positive attitudes toward online learning but still have a preference for traditional classes because of the need for face-to-face contact. Upton (2006) looked at student performance in both a traditional course and an online course that used the Blackboard website. The study found that there was no significant difference in terms of student performance on tests, assignments, or final grades. Wang and Woo (2007) compared group discussions in an online version to the face-to-face version of the same course. They identified five main themes that differed between the two, but the only theme that scored positively in student ratings of online courses was the atmosphere (defined as authenticity or clarity of the discussion) because of the comfort of being able to think about responses and the equal access to discussion. Student reflections showed that face-to-face discussions are strongly preferred over online discussions.

When Upton (2006) surveyed participants from face-to-face and online courses, results showed that students have contradictory opinions about online classes. Students value e-learning but still prefer face-to-face contact. Eighty percent of the respondents surveyed indicated that they found Blackboard more convenient than face-to-face classes, yet 52% of the student respondents said that they would choose a traditional class over an online class. Responses indicated that students had trouble finding the motivation to participate in the asynchronous online class because there was no particular time allotted for that class. Braun (2008) surveyed 90 graduate students studying education and found similar results. Fifty students were enrolled in a hybrid course that involved both face-to-face class contact and online discussion, whereas the other 40 students were enrolled in an online course with no face-to-face contact with the professor and other students. Students stated that

they felt that there was far less interaction with their instructors and classmates online and that they preferred the hybrid class only because of their need for face-to-face interaction.

The studies discussed earlier examined the attitudes and participation of students in asynchronous online environments and indicated that students' preference for face-to-face contact affects their attitudes toward online learning. "Today, we know that under good conditions, a computer conference, coordinated by a competent and an alert moderator, facilitates the development of cohesion within the group, stimulates a productive interactive dynamic and gives rise to a sort of collective intelligence" (Henri & Ricciardi Rigault, 1996, p. 51).

The introduction of a synchronous course system online in which a form of face-to-face communication is possible could have a greater positive impact on students' attitudes toward e-learning because of the opportunity for real-time interaction or transaction. This form of online course "provides a framework for group collaboration from a distance . . . which, in pedagogy, can enhance collaborative learning" (Henri & Ricciardi Rigault, 1996, p. 50).

Studies by Laurent (1987) and Hotte (1990) have suggested that many mature, nontraditional students favor the online, asynchronous model because they can work "individually, at their own pace, without having to grapple with the attendant constraints of any group process or of their personal, family and professional life" (Henri & Ricciardi Rigault, 1996, p. 50). Conversely, a major goal of online courses offered by residential universities is for students to become engaged and active in their learning in both the cognitive and social domains. According to Brown (2008), student-centered instruction is a form of active learning in which students are engaged and involved in what they are studying. It is believed that students will learn more by doing and experiencing rather than by only observing.

This study focuses on synchronous and asynchronous active

learning techniques that can develop collaborative communities of small, self-directed learning groups online. The term *active learning* has not been definitively defined in the educational literature, nor has anyone been able to pinpoint its origins, but Bonwell and Eison (1991) contrasted it with *passive learning,* which takes place when students listen and become receptacles of knowledge but do not participate in the learning process. Active learning, conversely, takes place when more emphasis is placed on developing skills than on transmitting information; when students engage in thinking that involves analysis, synthesis, and evaluation; when they are involved in activities like reading, discussing, and writing; and when an emphasis is placed on having students explore their own attitudes and values.

According to Prince (2004), active learning is any instructional method that engages students in meaningful learning activities and requires them to think about what they are doing. His definition echoes Bonwell and Eison's (1991) in that he contrasts active learning with a traditional lecture in which students are passively listening to and receiving information from an instructor. At its core, active learning requires student activity and engagement in the learning process. It seems clear that the MOOCs are able to deliver some, but not all, of these qualities. What is missing from MOOCs is the richness afforded by student-centered discussion and a student-directed collaborative process of discovery, skill development, and reflection.

For active learning to succeed, the planning, teaching, and assessing of the course should revolve around the needs and abilities of the students. The benefits of this learning style include self-sufficiency for the student and creativity, appreciation, and value for the subject being taught. This implies that the instructor becomes more of a facilitator—a "guide on the side" rather than a lecturing "sage on the stage."

In active learning, the instructor is also viewed as a learner.

McCombs and Vakili (2005) looked at online distance education in terms of developing courses that were learner centered. Instead of differentiating between instructor and student, McCombs and Vakili stated that "technology can be used to change the role of teachers to that of co-learners and contributors to the social and interpersonal development of students" (p. 1596). They emphasized that learning is enhanced in contexts where learners have supportive relationships, have a sense of ownership and control over the learning process, and can learn with and from each other in safe and trusting environments. Obviously, the creation and facilitation of this enhanced learning environment is a complex social process that has many interconnected factors beyond establishing a platform for the transmission, retention, and evaluation of content.

When online groups interact, the potential for cooperation and collaboration increases. What are the conditions—asynchronous or synchronous—that promote cooperative or collaborative social processes?

Walther and Bunz (2005) identified and tested six communication rules in asynchronous online environments. They hypothesized that the development of trust and liking as well as the performance of partners who work in virtual groups, and therefore do not see each other or work near each other, are factors in fostering collaboration. The rules focused on not procrastinating, communicating frequently with other group members, organizing and working on projects simultaneously, overtly acknowledging a group member's text-based communication, being explicit about what each group member was thinking and doing, and establishing as well as sticking to deadlines. Walther and Bunz hypothesized that the more group members adhered to each rule in a virtual group, the more the group members would trust each other, like each other, and perform better. The hypothesis was confirmed. The study did not establish whether these were definitive rules or whether any rule-following behavior produced the effects.

Becoming more aware of the work processes of other virtual team members may also reduce uncertainty and enhance trust. Leinonen, Jarvela, and Hakkinen (2005) identified three aspects of collaboration awareness—an awareness of the possibility for collaboration, an awareness of the aims of collaboration, and an awareness of the process of collaboration—and presented guidelines for discussing what an awareness of collaboration means in the context of virtual teams.

Collaborative social processes differ from cooperative ones. Prince (2004) defined cooperative learning as a form of group work in which students work together to accomplish a common goal but are assessed individually. In addition to individual accountability and interdependence, Prince included face-to-face interaction, the practice of interpersonal skills, and regular self-assessment regarding how the team is functioning in the definition of cooperative learning.

In collaborative learning, however, the emphasis is on student interactions rather than on students working in isolation to achieve goals. Hooper (1992) made a distinction based on the structure of the task. In cooperative learning, students are highly interdependent; they divide up the work and specialize in separate areas and then teach each other their content or present their parts in serial format to an audience. For example, if 50 words of a foreign language are needed to be learned in a group of five, each member might learn 10 and teach them to the other members or simply present their 10 words to the audience. Such a group is highly dependent on each member to do his or her task well for the group as a whole to succeed. In the collaborative learning the authors sought to foster, all students would be encouraged to learn all 50 words and then present the content to an audience as a unified whole.

In an exploratory study of functional moves, Paulus (2005) gave small groups of experienced online students a variety of communication tools and specific guidelines for collaborating

on two different types of goal-oriented tasks. Paulus studied the transcripts of group conversations to identify conceptual (task or content related), nonconceptual (social or relationally related), and logistical (related to the online technology) segments of talk. The goal was to determine whether small online groups took a collaborative or a cooperative approach to completing assigned tasks when specifically told to collaborate. Paulus found that students took a cooperative rather than a collaborative approach even when specifically told to collaborate.

Once there is online synchronous interaction that enriches the asynchronous environment, it seems behaviors that enhance trust and liking and the potential for collaboration improve, and according to Psycharis (2008), students' ability to complete more complex tasks improves also.

Psycharis (2008) explored the possible relationship between task structure and collaborative group interactions in a synchronous online learning environment. One group studied concept maps with a single-answer task, while the other group studied concept maps with a variable-answer task. Psycharis found that in the group that had a variable-answer task, synchronous interactions supported the creation of high-level concept maps, and students demonstrated a willingness to insert concepts, show links, and discuss their views using the chat and forum platforms.

In sum, the preceding research has shown that when students are engaged and active learners in a synchronous online environment, they report greater satisfaction, and that overcomplex technology creates an unnecessary barrier to easy interaction and collaboration. Moreover, students like the ability to see grades and do course-related work asynchronously online but miss face-to-face interaction. Seemingly, once there is synchronous interaction and transaction, then not only do social skills, trust, and liking improve but cognitive richness and the ability to complete more complex tasks improve also. Synchronous online learning environments

do allow for the creation of class assignments that foster cooperation, collaboration, and the development of self-directed active learning groups.

The objectives of the present study are to answer the following research questions:

RQ1: How will student attitudes toward online group learning change following their experience in a completely online class using asynchronous and synchronous communication technologies?

RQ2: When given a common task, will groups in a completely online learning environment cooperate or collaborate?

RQ3: How can active learning techniques be used to develop communities of learners in an online environment?

METHOD

The unit of analysis for this study was the pattern of interactions that formed and emerged as the students completed the assignments, collaborated on solving a complex real-world problem, and made live synchronous presentations in online versions of a general education human communication class during summer sessions in 2008, 2009, and 2010. In each summer session, the students were divided into groups based on their meeting time preferences and availability. Each group was responsible for completing a project in which they had to research ways that the university could "go green" and delivering a synchronous presentation that outlined their solutions. The students used the Blackboard web conferencing program to connect and work on these projects using voice, webcams, and text chat. The students and the instructors met synchronously using the web conferencing software a minimum of once a week, and each group scheduled additional synchronous meetings with group members. They also used asynchronous text messaging.

Participants

In 2008, the class consisted of 11 undergraduate students (7 seniors, 2 juniors, 1 sophomore, and 1 freshman) and 3 instructors. In 2009, 10 students were enrolled (2 seniors, 2 juniors, 5 sophomores, and 1 freshman), and there were 2 instructors and 1 observer. In 2010, there were 10 students (4 seniors, 3 juniors, 3 sophomores, and no freshmen) enrolled in the class and 2 instructors. Students and instructors accessed the class from multiple remote locations using computers and webcams.

Procedures

The process used to answer the research questions was a computer-mediated discourse analysis approach (Herring, 2004; Paulus, 2005). The authors reviewed all the recorded synchronous class sessions and synchronous group presentations. Reviewed were all course materials, instructors' notes and lecture materials, conversations between faculty and students, conversations between students and students, and the texted interactions in the "chat box" for every session. As they watched the recorded class sessions and group presentations, each author wrote descriptive notes, coded messages as functional moves, and made observations.

A *functional move* is defined as the purpose served by a particular part of a message, which is similar to speech acts or what Henri and Ricciardi Rigault (1996) defined as "the smallest unit of delivery, linked to a single theme, directed at the same interlocutor, identified by a single type, having a single function" (p. 62). The authors (Ball and Leppington) determined that some statements could serve more than one purpose at the same time, and where that was the case, multiple functional move codes were given to identify the pragmatics of the speech act.

Functional moves were identified as conceptual or nonconceptual in nature; talk that was identified as conceptual (C) was talk between students and between students and the instructors that focused on

class content. This included instructor lectures, student responses to topics, and questions and answers about concepts, theories, or materials. Nonconceptual moves were related to interdependent logistical moves (L1), synthesis logistical moves (L2), or logistical moves mutually independent from the instructor (L3). Two other categories were relational–social exchanges (RS) and (T) technical moves (see Table 1, next page).

Interactions and functional moves in the synchronous class sessions and in the group presentations that contributed to the development of online communities of self-directed learners were identified. They were characterized by enhanced instructor–student and student–student transactions during the synchronous classes; evidence of interaction that went beyond cooperation toward collaboration; and assessments of how well or poorly the participants used the technology and either needed instruction, relied on each other for specific task completion, or collaborated and helped each other learn and perform.

RESULTS

The three categories of L1, L2, and L3 indicated behavior related to the building of a community of learners. A higher incidence of L1 moves was considered an indication of groups whose interactions were of an aggregate of individuals, with each individual reliant on others for their individual parts in contributing to the overall success of the group. A higher incidence of L2 moves was considered an indication of groups who were more strongly cooperative, self-directed, and moving toward more collaborative strategies. A higher incidence of L3 moves was considered an indicator of groups whose interaction was strongly self-organizing and collaborative.

General criteria for interpreting the findings were established from the online course learning objectives. Definitions of *cooperation, collaboration,* and *active learning* (Ahlfeldt & Sellnow, 2009;

Table 1. *Coding Categories*

Category	Description	Functional moves	Examples
		Conceptual	
Conceptual (C)	Addresses the conceptual understanding of the content of the current task	Share information; discover inconsistencies; negotiate meaning; propose compromise; agree on compromise	"A purpose statement is a short sentence that states the general purpose and the main thesis of the speech."
		Nonconceptual	
Logistical–interdependent (L1)	Addresses the management and completion of the task with regard to individual cooperative workload	Manage/report/follow up; take action; initiate or suggest; respond; elicit response; engage others to act	"The best thing to do with groups is to break up the work, but have one person responsible for compiling the outline."

Continued below

Logistical–synthesis (L2)	Organizes the coordination of work among the members of the group with regard to collaborative practices	Take existing information and combine and reorganize it into group-wide new assertions, units, or concepts	"We can take Roland's PowerPoint slide from the test and Brittney's answer on number 3 and combine them for our second main point."
Logistical–mutually independent from instructor (L3)	Plans, synchronizes, or sequences meetings, work production, or social interaction	Organize self-directed learning groups	"OK, we'll meet at 5:30 on Sunday to make the PowerPoints. Everybody come with their slides."
Relational–social (RS)	Greetings, closings, small talk	Socialize; empathize; support	Audio: "Hi to my group. Hi Brittney, Raoul, and Guy, Kate can't be with us today, she's sick." Text chat: "Sad" emotiface icon. "Get well!!"
Technical (T)	Concerns the functionality and ease of use of the communication tools	Manage technology; support; emote	"The server must be slow or something, I tried uploading the file, but nothing seemed to happen." "Try closing out and coming back in again."

Flanagin, Park, & Seibold, 2004; Gasson, 2005; Goodsell, Maher, & Tinto, 1992; Hathorn & Ingram, 2002; Leinonen et al., 2005; Millis & Cottell, 1998; Paulus, 2005; Psycharis, 2008; Walther & Bunz, 2005) were synthesized. Criteria for judging technological skills included comfort levels, ease of coordination, and the ability to multitask and troubleshoot problems. The researchers' experience teaching face-to-face classes formed the basis for judging the effectiveness of presentations.

The findings focus on attitude changes, whether groups cooperated or collaborated on a common task, and how problem-based learning developed communities of learners.

Attitudes Toward Online Group Learning

With regard to attitude changes, there were strong initial concerns about the technology, but they changed once the students found that they could cope and work together with others. In 2008, responses to the course survey indicated that students in the online class liked working in collaborative groups; the responses to the prompt "I really like working in collaborative groups at school" showed a significant increase between pretest and posttest. Overall, responses suggested that students enjoy working together online and that their participation in the online course leads to a more positive attitude toward group collaboration.

In the surveys, students were given open-ended questions. Students were asked to write about any fears or concerns (L1) they had about working in an online collaborative setting. Some students stated that they were worried about using technology (T) with which they did not have experience. Other students noted concerns about having to depend on other group members (L1). These concerns ranged from being worried about working around people's schedules to finding time to meet (L1), having to rely on others to get a project done (L1), and worrying about the commitment of the other students (L1).

At the end of the course, some students said that they still had some concerns about their ability to use new technology (T), but most said they had had a positive experience. At first, some said they had been concerned about the class but realized that they had successfully balanced their time (L2) and that it was easier to work together (L2) without the pressure of always having to meet in person (L2). One student noted that he enjoyed the group work when he had a "good partner" (L1, RS). Another student found the lack of a personal presence at synchronous group meetings to be very frustrating (L3), saying that if a team member missed a meeting, another member would e-mail the transcripts and information from the meeting. However, the absent member would fail to read this information and then be lost at later meetings.

Even in online environments, there are likely to be social loafers, but it seems that once students become comfortable with the technology, they enjoy working together on more complex tasks. This supports Paulus's (2005) findings.

Although most students indicated that they enjoyed working together, some students responded that they felt isolated or unconnected. For example, in 2009, four out of nine students said they did not expect to complete the class on their own (L1), but five did (L1). However, all nine expected that there would be group work (L1). Four "strongly agreed" and five "agreed" that they enjoyed the group work (L2, L3). Six out of nine students felt connected, but three did not. Only one agreed that she felt isolated.

Over the 3 years, there were 30 students. Six responded that they did not feel connected to the rest of the class. Further coding explored their responses.

One student (a senior) did not expect to complete the online course individually and did expect group work (L1). Another student said that he enjoyed the class but did not feel connected (RS). Another senior did expect to complete the online course on her own but also expected there to be group work (L1). Though the

student said that she enjoyed working with the other members in the group (L1), the student did not feel "a sense of connection with other class members" (RS) but did not feel isolated either.

These contradictory functional moves were not typical responses. The other students enjoyed working with others and made positive community-oriented comments. For example, a senior said, "I loved my group and I felt we worked great togeter [*sic*], they are definitely people I see myself meeting up with and staying friends with" (RS). A sophomore student said, "I would strongly recommend this program because it allows the student to gain a new perspective on speaking (C). In the future all speeches may not be given in person and learning this new technique could prove extremely helpful" (T).

One of the students made substantive suggestions for improvement, which were adopted by the instructors in 2010. The student wanted to make the class meet two days a week rather than one. This suggestion was taken as evidence of community building because the students were expressing a desire for more time working together.

Most students said they felt that they were part of a community. Those who felt unconnected, isolated, and not part of a community made no mention of community issues in their open-ended comments; rather, all their open-ended comments dealt with technical or conceptual issues.

The responses of the students who felt isolated were contradictory. On one hand, these students wanted to complete the course on their own and did not want face-to-face public speaking, but on the other hand, they also complained of a lack of immediacy with instructors, group members, and the audiences in the presentation. These students stated that they took the course because it was a general education requirement and that taking it online was convenient and would enable them to get the requirements done in the shortest possible time.

For a student whose only stated reason for taking the class was to

satisfy a general education requirement, what hindered the student most was the "inability to contact [his] group members more often due to conflicting schedules" (L2). Despite these hindrances, the student "would recommend [the class] to other students because it allows you to become familiar with an online environment that is becoming increasingly popular with businesses that want to cut down on travel costs" (T).

These comments allow comparison between differing entering attitudes and expectations and what actually happens during the course. If students expect the correspondence course model, they find organizing their time around others to be a hindrance, which is similar to findings by Laurent and also by Hotte (as cited in Henri & Ricciardi Rigault, 1996). But most came to enjoy group work over time.

One student, reflecting the sentiments of three other students, stated, "I really liked this course, to be honest first I thought that it would be really boring and painful to take this class, but during the course and after I have to say that this has been one best [*sic*] classes that I have taken at [name of university], one of the most informative and I actually learned a lot not like in other courses that I mostly feel I dont [*sic*]. This was definitely the best online class I have ever taken. The teachers were really helpful and I really enjoyed the group assignment. Overall great class."

The "Go Green" Presentation Assignment

A problem-solving project called the "Go Green" assignment was designed to be a thread or theme throughout the course rather than a stand-alone, unrelated topic. The instructors determined that the presentation would be a group presentation and that it would be recorded in a synchronous session during class. Students in the presenting group had moderator privileges, which were usually reserved for the instructors. These privileges required the students to be responsible for planning and running the online environment.

The instructors became part of the audience and handed over the class session to the students. The final group presentations took place over the last week of the course, during which time students demonstrated their speaking skills, their organizational skills, their "netiquette" skills (their ability to take turns, use emoticons, manage microphones and video panes), and their ability to share documents on-screen and to present a series of PowerPoint slides.

Cooperation Versus Collaboration

In the first year, the presentations were filled with audio, video, Internet access, and technical problems (T). The high incidence of functional moves from students was mostly in text chat, while the instructors used audio to communicate with the students and colleagues. Video technology was limited to one person on camera at a time. The text chat function was used predominantly by all groups to complain about the technology not working the way it should (T). On one occasion, the students used the text function to sympathize (RS) and then used text as a means of resolving a logistical problem in the presentation when one member lost audio (L1 and T).

Within the presentations themselves, groups used collaboration (L3) to come up with solutions to the technical problems they faced (T). But it was the judgment of the instructors that the students cooperated (L1) more than collaborated (L3) in the presentation research and development phases. Students dealt with ambiguity (i.e., technical problems with audio, video, and computer processing speed) quite well, considering that few of the participants had taken an online class before.

When the Elluminate technology allowed for six webcams at once, students and instructors cycled themselves in and out of the video panes. Because the students making presentations were still limited to one microphone, they were asked to "raise their hands" via an emoticon to take turns speaking (T). The instructors had

previously modeled, requested, and coached the students in cooperating using the turn-taking procedure of turning on a student's microphone, talking, and then turning off the microphone again (T).

When the PowerPoint slide templates changed with each new speaker, those groups were identified by the instructors as cooperating more than collaborating (L1) in the preparation of materials. Some groups showed more cohesive behavior in their presentations (L3). They practiced in Elluminate, and their ideas were very coherent and creative (L3). During the question-and-answer sessions, the groups went back to their PowerPoint slides to explain questions raised by instructors (L2).

As an example of collaboration, just before one group's presentation began, they realized that one group member would not be present. There were no "freaking out" moves in text chat (RS) between the remaining two group members, although there were functional moves to plan and synchronize work production (L3) in chat and audio to cover for him. Much of the text chat was social (RS) in nature. One group member was able to cover the material for the missing group member, suggesting that the group collaborated in the preparation of the materials (L3) and used the same PowerPoint template, which was coded as evidence of consistency and collaboration (L3).

In the third year, moderate use of text chat was observed and was more congratulatory, focusing on social aspects (RS). Group members and audience members were much more comfortable with the technology. Greatly improved instructors' skills were also noted compared to earlier years (T). Everyone's confidence and competence allowed for more and better modeling of technical aspects, and a higher level of cohesiveness among the group members was noted.

In the third year, students from other groups attended as audience members for other presentations, and one student asked questions of the presenters. Audience members were also on camera and

were cycling themselves in and out of the video panes unprompted. Some members were at earlier presentations because they wanted to support the others but also because they wanted to improve their own presentations. But members of the earlier groups were also present for the later presentations and clearly were interested in supporting their classmates (RS). The noted increase of in-group community was a result of the accumulative effects of community-building activities.

DISCUSSION

Depending on student expectations, attitudes toward online group learning did change in a variety of ways following students' experiences in an online class that used asynchronous and synchronous communication technologies. If students entered the course wanting the correspondence course model, they found organizing their time around others to be a hindrance. If students entered the course more open-mindedly, they developed positive relationships and ended up strongly in favor of this type of online course.

Students who said in the beginning that they did not like working with others or who only took the course as a quick way to complete their general education requirements were affected by finding that they could make friends with people online. Even if their attitudes were not changed, they still recommended the course to others as a way to complete the general education requirements.

In 2008, instructor observations revealed high levels of apprehension around the use of the webcams, the microphone, turn taking, and general competence with virtual technology. These levels of apprehension decreased in 2009 and 2010. Student attitudes became more positive and were accompanied by expressions of enjoyment, ease of use, and less panic when things went wrong. The authors discounted the idea that this generation of students comprised "technology natives" and that the older generation were "technol-

ogy immigrants." The younger generation was just as apprehensive, and sometimes just as befuddled, as the older generation.

Each year showed a greater level of comfort, and from our coding of functional moves, it was clear that the students were most comfortable in the text channel, less comfortable in the audio channel, and least comfortable in the video channel in 2008. By 2010, they had become equally comfortable with all three channels.

We noted that (cf. Paulus, 2005), when given a common task, initially, students tended to cooperate even when they were told to collaborate. This was more noticeable in 2008 and 2009, but by 2010, because of the combination of the self-reflexive design of the assignments, the improved facilitation and explanation given by the instructors, and their increased emphasis on collaborative techniques and active learning, plus the shortened time available, the students were collaborating more.

The development of trust and liking was an accumulative process that helped to foster collaboration. Coding the functional moves by year showed that as the assignment design improved, the students could be seen to follow Walther and Bunz's (2005) six communication rules. These were all supportive collaborative (L3) practices that improved over time.

The authors found that the Go Green assignment became a thread or theme throughout the course rather than being a standalone, unrelated topic. When given the Go Green assignment at the start of the course, the students set up small, self-directed learning groups and self-managed synchronous groups, became focused on a common goal, self-reflexively discussed online community building, and engaged in the synchronous class sessions in a strongly conversational style. The recorded class sessions showed evidence of the successful development of communities of learners who developed a level of trust in each other. The coded functional moves showed that the Go Green assignment pushed the students beyond cooperating in 2008 and into collaborating by 2010. By

2010, they showed both in-group and cross-class cohesiveness when they attended each other's presentations, and they engaged in high levels of relational–social comments both in text and audio.

To echo the words of Henri and Ricciardi Rigault (1996), this model for a virtual asynchronous and synchronous transactional online course design "coordinated by a competent and an alert moderator, facilitates the development of cohesion within the group, stimulates a productive interactive dynamic and gives rise to a sort of collective intelligence" (p. 51). The authors have shown that groups can utilize active learning to develop communities of learners in an online environment. The authors speculate that this model could be extended to enrollment numbers larger than those studied here and think that multiple small groups could be managed in this way using a rolling entry schedule that is not restricted to the traditional semester calendar.

REFERENCES

Ahlfeldt, S., & Sellnow, D. (2009). Problem-based learning (PBL) and student engagement in the public speaking classroom. *Basic Communication Course Annual, 21*, 134–150.

Bonwell, C. C., & Eison, J. A. (1991). *Active learning: Creating excitement in the classroom* (ASHE-ERIC Higher Education Report No. 1). Washington, DC: George Washington University School of Education and Human Development.

Braun, T. (2008). Making a choice: The perceptions and attitudes of online graduate students. *Journal of Technology and Teacher Education, 16*(1), 63–92.

Brown, J. K. (2008). Student-centered instruction: Involving students in their own education. *Music Educators Journal, 94*(5), 30–35.

Flanagin, A. J., Park, H. S., & Seibold, D. R. (2004). Group performances and collaborative technology: A longitudinal and multilevel analysis of information quality, contribution equity, and member's satisfaction in computer-mediated groups. *Communication Monographs, 71*(3), 352–372.

Gasson, S. (2005). The dynamic of sensemaking, knowledge, and expertise in collaborative, boundary-spanning design. *Journal of Computer-Mediated Communication, 10*(4), Article 14. Retrieved from http://jcmc.indiana.edu/vol10/issue4/gasson.html

Goodsell, A. S., Maher, M. R., & Tinto, V. (1992). *Collaborative learning: A sourcebook for higher education.* University Park, PA: National Center on Postsecondary Teaching, Learning, and Assessment.

Hathorn, L. G., & Ingram, A. L. (2002). Cooperation and collaboration using computer-mediated communication. *Journal of Educational Computing Research, 26*(3), 325–347.

Henri, F., & Ricciardi Rigault, C. (1996). Collaborative distance education and computer conferencing. In T. Liao (Ed.), *Advanced educational technology: Research issues and future potential* (pp. 45–76). Berlin: Springer.

Herring, S. C. (2004). Computer-mediated discourse analysis: An approach to researching online behavior. In S. A. Barab, R. Kling, & J. H. Gray (Eds.), *Designing for virtual communities in the service of learning* (pp. 338–376). New York: Cambridge University Press.

Hooper, S. (1992). Cooperative learning and computer-based instruction. *Educational Technology Research and Development, 40*(3), 21–38.

Hotte, R. (1990). *Profil de l'etudiant adulte: Notes de recherché.* Quebec: Tele-university.

Laurent, J. (1987). *Les Etudiants de la Tele-university et leurs projets d'etudes: Enquete sur les "abondons" des inscrits de l'autonne.* Quebec: Tele-university.

Leinonen, P., Jarvela, S., & Hakkinen, P. (2005). Conceptualizing the awareness of collaboration: A qualitative study of a global virtual team. *Computer Supported Cooperative Work, 14*(4), 301–322.

Lewin, T. (2012, May 2). Harvard and M.I.T. team up to offer free online courses. *New York Times.* Retrieved from http://www.nytimes.com/2012/05/03/education/harvard-and-mit-team-up-to-offer-free-online-courses.html?_r=1&ref=massachusettsinstituteoftechnology

McCombs, B. L., & Vakili, D. (2005). A learner-centered framework for e-learning. *Teachers College Record, 107*(8), 1582–1600.

Millis, B. J., & Cottell, P. G., Jr. (1998). *Cooperative learning for higher education faculty.* Phoenix, AZ: Oryx Press.

Molesworth, M. (2004). Collaboration, reflection and selective neglect: Campus-based marketing students' experiences of using a virtual learning environment. *Innovations in Education and Teaching International, 41*(1), 79–92.

Paulus, T. M. (2005). Collaborative and cooperative approaches to online

group work: The impact of task type. *Distance Education, 26*(1), 111–125.
Prince, M. (2004). Does active learning work? A review of the research. *Journal of Engineering Education, 93*(3), 223–231.
Psycharis, S. (2008). The relationship between task structure and collaborative group interactions in a synchronous peer interaction collaborative learning environment for a course of physics. *Education and Information Technologies, 13*(2), 119–128.
Upton, D. (2006). Online learning in speech and language therapy: Student performance and attitudes. *Education for Health, 19*(1), 22–31.
Walther, J. B., & Bunz, U. (2005). The rules of virtual groups: Trust, liking, and performance in computer-mediated communication. *Journal of Communication, 55*(4), 828–846.
Wang, Q., & Woo, H. L. (2007). Comparing asynchronous online discussions and face-to-face discussions in a classroom setting. *British Journal of Educational Technology, 38*(2), 272–286.

Addressing Media Literacy Within Higher Education: A Comparison of Faculty and Student Perceptions

HANS C. SCHMIDT

Pennsylvania State University, Brandywine

Despite a growing acknowledgment of the importance of media literacy in the modern age of media convergence, the development of media literacy education at the university level has been slow. This study involves a comparative analysis of faculty and student perceptions regarding the extent of student media literacy competencies, the degree to which media literacy competencies are addressed within university-level classes, and the importance of addressing media literacy within higher education. Data suggest that faculty members may overestimate the extent to which they address media and that increased attention to the topic is warranted.

KEYWORDS: Media literacy, media education, higher education, faculty perspectives, student perspectives

The thirst for all things media related continues to grow, with Americans spending 81 minutes more each day with some form of media in 2011 than they did one decade prior. Each day, Americans aged 18 years and older spend over 5 hours watching television, 2.5 hours using the Internet, 1.5 hours listening to the radio, and 0.5 hours reading newspapers (Television Bureau of Advertising, 2010). Smart phone ownership—and the associated use of streaming wireless media content—increased 14% from 2010 to 2011 alone, with

Hans C. Schmidt, Ph.D., is an assistant professor of communication at Pennsylvania State University, Brandywine. He can be reached at 25 Yearsley Mill Road, Media, PA 19063 or at hcs10@psu.edu.

mobile media use averaging 19.2 minutes daily. Meanwhile, social networking continues to grow in popularity, with the percentage of Americans using Facebook rising from just 8% in 2008 to 51% in 2011 (Arbitron, 2011).

This growth in media use has led to the parallel development of an acknowledgment that a broad set of competencies spanning multiple modes of expression are needed for true literacy today. Based on the idea that literacy now involves "reading the word and the world" (Freire & Macedo, 1987), a recognition of the existence of multiple literacies has developed. Among these multiple literacies is media literacy.

Because of its many contextual and disciplinary applications, there are many ways to understand and define *media literacy* (Fedorov, 2003). Potter (2010) identified at least 23 definitions that have been developed by scholars and citizen action groups. While the focus and scope of these definitions vary, notable commonalities exist (Potter, 2010). Generally, definitions all suggest that media literacy involves a mix of core competencies associated with a variety of peripheral skills. One way to operationalize the "series of communication competencies" (National Association for Media Literacy Education, 2011) associated with media literacy is to break them into categories of media use, creation, and analysis (Schmidt, 2012; Wulff, 1997).

Media use involves accessing, finding, and selecting media to inform or entertain (Wulff, 1997) and is closely associated with the concept of *information literacy* (American Library Association, 2012; Koltay, 2011). First, media access is a necessary precursor for the development of further media literacy competencies; possessing the ability to acquire access to media outlets and technologies allows for further participation in media education and media culture (Kellner, 2002; Norris, 2001; Rice, 2002). Additionally, competencies associated with finding and selecting media are needed to effectively sort through the wide range of available content and identify

relevant and useful media in all aspects of life (Maughan, 2001).

Media creation involves planning, producing, and sharing original media (Ascher & Pincus, 1984; Hobbs, 2004; Lund, 1998; O'Brien, 2005; Williams & Medoff, 1997). Media creation competencies are important for several reasons. Jenkins (2006) suggested that creation competencies are especially necessary for participation in the modern world of media convergence, in which individuals are part of an active culture involving engaged, participative consumers who create, share, and seek out new information. Others, like Hobbs (1998) and Sefton-Green (1999), have suggested that the development of media creation competencies is necessary because individuals can come to understand the conventions of professional media by gaining experience with creating their own media. Finally, as Livingstone (2004) suggested, developing media creation competencies can help empower otherwise voiceless members of society.

Accordingly, media creation competencies are necessary for participation in a media-rich culture and allow individual students to make meaning from interactive media (Holland, Jenkins, & Squire, 2003), while also gaining a voice that allows for effective communication and interaction with wider audiences (Sefton-Green, 2006; Snyder & Beavis, 2004).

Media analysis involves deconstructing a message, identifying elements related to the media text and context (Lewis & Jhally, 1998), and developing an understanding of the relationship between media and culture (Livingstone, 2004). Buckingham (1998) suggested that such analysis involves issues of media agency, categories, technologies, languages, audiences, and representations. Similarly, and more directly, Hobbs (2004) suggested that media analysis involves identifying elements such as target audience, techniques employed, and message subtext. Ultimately, this allows individuals to develop what Potter (2004) described as knowledge structures that help an individual both to understand media and, as Silverstone

(2004) suggested, to participate in "modern society, involving as it does the critical skills of analysis and appreciation of the social dynamics and social centrality of media as framing the cultures of the everyday" (p. 48).

In the process of developing competencies related to media use, creation, and analysis, students move beyond passive media consumption (Bergsma, 2004; Buckingham, 2007a; Claussen, 2004; Galician, 2004; Sefton-Green, 2006; Silverstone, 2004; Thoman & Jolls, 2004) to become empowered and "sophisticated citizens" (Lewis & Jhally, 1998) who are aware of the function of media in society (Silverblatt, Ferry, & Finan, 2004). As Martens (2010) suggested,

> the vision of media literacy education, then, is to enable students to fully comprehend and act on the content, form, purpose, and effects of media messages. . . . In this way, they become fully able to participate as critical consumers and citizens in a media saturated society. (p. 6)

To help students acquire these competencies, programs in media literacy education have grown significantly at the K–12 level (Daunic, 2011). When implemented and studied, such media literacy interventions have been found to be highly successful (Jeong, Cho, & Hwang, 2012). However, there has been considerably less focus on media literacy within higher education (Duran, Yousman, Kaitlin, & Longshore, 2008). Although various aspects of media literacy are likely addressed in interdisciplinary formats within university-level classes, formalized, comprehensive media literacy education programs in postsecondary higher education are uncommon (Mihailidis, 2006; Silverblatt, Baker, Tyner, & Stuhlman, 2002; Stuhlman & Silverblatt, 2007; Wulff, 1997).

It remains unclear exactly why media literacy has grown so slowly within higher education. Existing research has suggested that at least some faculty members believe that media literacy is not relevant to

address within college or they assume that students have already developed related competencies at the K–12 level (Schmidt, 2012). Alternatively, the slow growth may be associated with a general overestimation of student media literacy competencies (Caruso & Salaway, 2007; Katz, 2006). This assumption of media competencies among members of the Net Generation may lead faculty members, or students, to feel that certain aspects of media literacy education are unnecessary. Yet, the extent of such perceptions is unclear. Furthermore, it is unclear if there are other views—among either faculty members or students—that may be leading to the slow growth of university-level media literacy course work.

This study addresses these issues by conducting a comparative analysis of student and faculty perspectives regarding the extent of student media literacy competencies, the extent of media literacy course work within higher education, and the importance of addressing media literacy within higher education. Such a comparative analysis makes it possible to understand how both student and faculty perspectives are related to each other and shape the way in which media curricula are designed. Three research questions address these issues:

RQ1: Do faculty members overestimate student media literacy competencies?

RQ2: To what extent do faculty members and students perceive that media literacy is addressed within university classes?

RQ3: To what extent do faculty members and students perceive that it is important to address media literacy within university classes?

METHODS

Participants

Student and faculty participants were drawn from a comprehensive private university in the Mid-Atlantic region of the United States. Focusing this study on one university limits the generalizability of

findings but allows for a more direct comparison of how educators and students perceive the same educational experience and facilitates the identification of general themes that may also exist among the broader population. Faculty participants ($N = 45$) responded to an e-mail invitation sent to all 91 faculty members at the university and ranged in age from 28 to 64 years ($M = 47.69$, $SD = 10.37$). The faculty sample comprised 44.4% ($n = 20$) female and 48.9% ($n = 22$) male faculty members from a variety of disciplines, including education (24.4%, $n = 11$), psychology (15.5%, $n = 7$), criminal justice (13.3%, $n = 6$), business (13.3%, $n = 6$), communication (8.8%, $n = 4$), science (8.8%, $n = 4$), mathematics (6.6%, $n = 3$), history (6.6%, $n = 3$), and athletic training (2.2%, $n = 1$).

Student participants came from a representative sample of undergraduate students enrolled at the university. E-mail invitations were sent to a random sample of 50% of the 1,673 students enrolled in the university, and 26.6% ($N = 223$) of these students responded. Student participants ranged in age from 18 to 59 years ($M = 25.84$, $SD = 10.70$), and 64.5% ($n = 144$) of participants were between 18 and 22 years of age. The student sample comprised 73.5% ($n = 164$) female students and 21.9% ($n = 49$) male students, of whom 24.2% ($n = 54$) were freshmen, 21.0% ($n = 47$) were sophomores, 22.4% ($n = 50$) were juniors, and 25.1% ($n = 56$) were seniors. Student participants came from a variety of majors; 18.8% ($n = 42$) of students majored in business, 14.7% ($n = 33$) majored in education, 12.1% ($n = 27$) majored in communication, 8.5% ($n = 19$) majored in nursing, 8.5% ($n = 19$) majored in psychology, 7.1% ($n = 16$) majored in liberal studies, and 3.5% ($n = 8$) majored in English. Other majors were represented in much smaller numbers.

Measures

A 46-item questionnaire was designed, tested, and used. The development of this questionnaire was based on data gathered from interviews with 16 university faculty members (Schmidt, 2012) in

the disciplines of communication, because of its ties to media education (Christ, 2004), English, because of its connection to the development of the multiple literacies perspective (New London Group, 1996; Scholes, 1998), and education, because of its connection to educational technology research (Saettler, 1990). The specific skills that faculty members identified as most closely associated with media use, creation, and analysis were used to construct the questionnaire.

The questionnaire consisted of background demographic questions and three categories of items. The first category considered perceptions of student media literacy competencies related to media use, creation, and analysis. The second category considered the extent of university-level instruction related to media use, creation, and analysis. The third category considered the perceived importance of university-level instruction related to media use, creation, and analysis. Participants reported their responses to each item using a 5-point Likert-style scale ranging from 1 (*strongly agree*) to 5 (*strongly disagree*).

During the trial study ($N = 42$), analysis using the Cronbach's alpha test indicated that there was good internal consistency, with an alpha coefficient above .70, for the media competencies category ($\alpha = .910$), the media education exposure category ($\alpha = .898$), and the media education importance category ($\alpha = .877$). During the study, analysis again indicated that there was good internal consistency for the media competencies category ($\alpha = .937$), the media education exposure category ($\alpha = .963$), and the media education importance category ($\alpha = .881$).

RESULTS

Perceptions of Student Competencies

Regarding the first research question (Table 1), which asked about perceptions of student media literacy competencies, data do not

suggest that faculty members overestimate student media competencies. Specifically, data show that on average, both faculty ($M = 1.77$, $SD = 0.66$) and student ($M = 1.87$, $SD = 0.61$) participants perceive that students possess media literacy competencies.

Specifically, faculty participants reported the perception that students possess competencies associated with all three dimensions of media literacy: media use ($M = 1.36$, $SD = 0.36$), creation ($M = 2.05$, $SD = 0.76$), and analysis ($M = 1.99$, $SD = 1.14$). Generally, the ages and years of experience of faculty members were not associated with different perceptions of student competencies. However, a Pearson correlation test did show a positive correlation between faculty age and perceptions of student competencies related to creating web pages ($r = .60$, $n = 45$), $p < .01$, and filming video ($r = .52$, $n = 45$), $p < .01$. This suggests that older faculty members may have an inflated perception of certain, limited student media competencies.

Although faculty members generally rated students as being media competent, few provided specific examples of the ways in which students are involved with using, creating, or analyzing media. Instead, typical responses suggested that students use media "for their enjoyment" or as "leisure activities." For instance, one participant wrote that students are involved in "watching TV shows and movies; reading newspapers and magazines; talking on cell phones; responding to text messages, e-mails, blogs, and Facebook."

Student participants reported perceiving that they possess competencies related to media use ($M = 1.52$, $SD = 0.47$), creation ($M = 2.16$, $SD = 0.94$), and analysis ($M = 2.03$, $SD = 1.02$). A Pearson correlation indicated that neither student academic year nor student age was associated with perceived media competencies. Yet, although students reported feeling that they possess wide-ranging media literacy competencies, open-response comments did not provide supporting evidence. When asked to identify the media-related activities in which they are involved, student participants

Table 1. *Perceptions of Student Competencies*

	Faculty		Students		
Item	***M***	***SD***	***M***	***SD***	**Sig. (2-tailed)**
Finding relevant information on the web	1.29	0.54	1.39	0.49	.235
Finding TV programming	1.29	0.45	1.45	0.74	.176
Using a cell phone	1.18	0.38	1.27	0.59	.312
Using a video game console	1.36	0.57	2.00	1.30	.000*
Locating print materials	1.71	0.78	1.51	0.69	.087
Creating a web page	1.87	0.89	2.77	1.57	.000*
Filming original video	1.87	1.01	2.28	1.41	.064
Creating digital images or photographs	1.62	0.88	1.80	1.00	.267
Writing material for print or online publication	2.87	1.14	1.80	1.07	.000*
Analyzing or deconstructing TV content	2.27	1.33	1.98	1.15	.138
Analyzing or deconstructing web content	2.07	1.19	2.09	1.15	.910
Analyzing or deconstructing advertising content	1.91	1.10	2.06	1.14	.416
Analyzing or deconstructing music content	1.73	1.19	2.02	1.14	.128

*Significant difference in mean scores, $p < .05$.

typically identified only the most basic forms of media use. For instance, students typically suggested that they are involved in viewing media content, social networking, online shopping, or finding media for school-related projects. For instance, one student wrote, "I use my cell every day for music, calls, internet, and text. I watch tv [*sic*] and try to get the message of the show." Another student commented, "Through social networking, blogging, or organizational/class activities." Another wrote, "I use an Ipod [*sic*] almost everyday [*sic*] and a cell phone."

Differences regarding perceived student competencies. An independent-samples *t*-test suggested that there were no significant categorical differences between scores for faculty participants ($M = 1.77$, $SD = 0.66$) and student participants ($M = 1.88$, $SD = 0.61$), $t(249) = 1.04$, $p = .32$ (two-tailed). However, while there was broad categorical agreement between faculty and student participants, a few isolated items suggested differences in perception.

Notably, faculty participants were more likely than student participants to perceive that students are competent users of video game consoles and to perceive that students can competently create a web page. However, student participants were more likely than faculty participants to perceive that students can competently write for online or print publication.

Perceptions of Media Literacy Course Work

Regarding the second research question (Table 2), which asked about faculty and student perceptions of the extent to which media literacy competencies are addressed in class, data suggest that faculty participants reported perceiving that they teach about topics related to media literacy ($M = 2.07$, $SD = 0.96$). In contrast, students did not report learning much about media literacy–related topics ($M = 3.18$, $SD = 1.00$).

Specifically, faculty participants, on average, reported teaching about media use ($M = 1.97$, $SD = 1.03$), creation ($M = 2.03$, $SD = 1.05$),

Table 2. *Perceptions of Media Literacy Course Work*

	Faculty		Students		
Item	***M***	***SD***	***M***	***SD***	**Sig. (2-tailed)**
Finding relevant information on the web	1.84	0.87	1.74	0.91	.486
Finding TV programming	2.13	1.27	3.50	1.51	.000*
Using a cell phone	1.96	1.27	3.94	1.37	.000*
Using a video game console	1.96	1.27	4.02	1.36	.000*
Locating print materials	2.00	1.02	1.87	1.00	.426
Creating a web page	2.09	1.24	3.59	1.54	.000*
Filming original video	1.96	1.24	3.86	1.38	.000*
Creating digital images or photographs	1.98	1.11	3.66	1.50	.000*
Writing material for print or online publication	2.09	1.06	2.66	1.45	.004*
Analyzing or deconstructing TV content	2.38	1.21	3.36	1.50	.000*
Analyzing or deconstructing web content	2.16	1.16	2.96	1.51	.000*
Analyzing or deconstructing advertising content	2.24	1.19	3.08	1.56	.000*
Analyzing or deconstructing music content	2.16	1.25	3.36	1.51	.000*

*Significant difference in mean scores, $p < .05$.

and analysis ($M = 2.23$, $SD = 1.12$) in their classes. Neither faculty age nor teaching experience was correlated with the extent of media literacy–related teaching. Even though faculty participants reported that they perceived teaching about media use, creation, and analysis, the only classroom activities that they identified when replying to an open-response question involved using media to conduct academic research. For instance, participants stated that they use media to help students find "articles that may be helpful to the students in the future" and to learn how to "research info that is relevant and factual." However, no faculty participants identified a single classroom activity related to media creation or analysis.

Student participants did not report learning much about media use ($M = 3.00$, $SD = 0.94$), creation ($M = 3.44$, $SD = 1.22$), or analysis ($M = 3.18$, $SD = 1.33$) in their classes. In most instances, there was no connection between either student age or student academic year and the amount of perceived learning about media. The only exception involved learning about locating print materials; a Pearson correlation test showed a positive correlation between both age ($r = .29$, $n = 180$), $p < .01$, and academic year ($r = .17$, $n = 176$), $p < .05$, and learning about locating print resources. This suggests that more experienced and older students have learned more about locating print resources.

Student open-response comments similarly suggested very limited learning about topics associated with media literacy. Students primarily suggested in their comments that their exposure to any form of media-related training involved learning about information literacy or conducting web-based research using online library databases. For instance, one student wrote, "I have taken a class on research on the internet." Another student wrote, "I was given a tour of how to use the library's databases and other materials for research information."

Differences regarding the perceived extent of media literacy course work. Results of an independent-samples *t*-test indicated that the

differences between faculty and student perceptions were significant. Specifically, when considering averages for each category of items, faculty participants (M = 1.98, SD = 1.03) reported significantly stronger perceptions that media use was addressed in class than did student participants (M = 3.00, SD = 0.94), $t(62.53) = 6.06$, $p = .00$ (two-tailed); faculty participants (M = 2.03, SD = 1.05) reported significantly stronger perceptions that media creation was addressed in class than did student participants (M = 3.44, SD = 1.22), $t(75.47) = 7.80$, $p = .00$ (two-tailed); and faculty participants (M = 2.23, SD = 1.12) reported significantly stronger perceptions that media analysis was addressed in class than did student participants (M = 3.18, SD = 1.33), $t(76.97) = 4.88$, $p = .00$ (two-tailed).

Perceptions of the Importance of Media Literacy Course Work

Regarding the third research question (Table 3), which asked about faculty and student perceptions of the importance of teaching about media literacy competencies, faculty (M = 2.01, SD = 0.57) and student (M = 2.14, SD = 0.67) participants reported perceiving that it is important to address topics related to media literacy in class.

Specifically, faculty participants reported the perception that it is important to teach about media use (M = 2.29, SD = 0.68), creation (M = 1.93, SD = 0.85), and analysis (M = 1.73, SD = 0.62). Neither faculty age nor years teaching was correlated with perceptions of the importance of teaching about media literacy.

Open-response comments from faculty participants only addressed the media analysis component of media literacy. Faculty participants suggested that it is important to help students learn "what is really the truth and how to find it" and about "information on the Web, print and online publications, and print materials." However, faculty participants did not address any specific aspects of media literacy associated with media use or creation that they considered to be important.

Table 3. *Perceived Importance of Media Literacy Course Work*

Item	Faculty		Students		Sig. (2-tailed)
	M	***SD***	***M***	***SD***	
Finding relevant information on the web	1.36	0.60	1.39	0.64	.722
Finding TV programming	3.09	0.94	2.85	1.60	.334
Using a cell phone	2.73	1.13	3.27	1.57	.012*
Using a video game console	2.73	1.09	3.69	1.47	.000*
Locating print materials	1.58	0.96	1.34	0.54	.116
Creating a web page	1.89	0.93	1.86	1.00	.856
Filming original video	2.09	0.87	2.04	1.20	.796
Creating digital images or photographs	1.96	0.79	1.94	1.10	.920
Writing material for print or online publication	1.78	0.82	1.63	0.75	.267
Analyzing or deconstructing TV content	1.78	0.76	2.20	1.28	.005*
Analyzing or deconstructing web content	1.49	0.69	1.75	0.91	.037*
Analyzing or deconstructing advertising content	1.69	0.66	1.90	1.04	.205
Analyzing or deconstructing music content	1.93	0.80	2.06	1.22	.504

*Significant difference in mean scores, $p < .05$.

Student participants, on average, reported perceiving that it is important to learn about media use ($M = 2.50$, $SD = 0.87$), creation ($M = 1.86$, $SD = 0.79$), and analysis ($M = 1.98$, $SD = 0.96$). In most instances, student age and academic year were not associated with the perceived importance of learning about media literacy. However, a Pearson correlation test did reveal a negative correlation between student academic year and the perceived importance of analyzing web-based content ($r = -.19$, $n = 166$), $p < .05$, and between student age and the perceived importance of learning about analyzing advertising content ($r = -.15$, $n = 167$), $p < .05$. This suggests that more experienced students see less importance in learning about analyzing Web content and that older students see less importance in learning about analyzing advertising content. In all other instances, there were no significant differences between students of different ages or academic years.

Open-response comments showed student support for media literacy education and focused largely on analytical competencies. For instance, one student commented, "I think analyzing media is something that all students should learn since it is essential in everyday life. Knowing how to choose which web sites or channels or programs or companies can be trusted for information." Another student wrote, "In this day in [*sic*] age, learning about media is important. Learning about the news and their portrayal and the web and how untrue some things are and the advertisement and the psychology behind it all." Another wrote, "It is important to learn about media since it is part of everyday life. i [*sic*] believe that all media should be taught in classes in that it gives a better understanding on how media influences our lives."

Differences regarding perceived importance. When considering averages of all items associated with the perceived importance of media literacy course work, an independent-samples *t*-test indicated that there were no significant differences between the responses of faculty participants ($M = 2.00$, $SD = 0.55$) and student

participants ($M = 2.14$, $SD = 0.67$), $t(221) = 1.28$, $p = .20$ (two-tailed). Yet, despite categorical agreement between faculty and student participants, several individual items suggested differences in perception. Specifically, faculty participants were more likely than student participants to perceive that it is important to learn about how to analyze or deconstruct TV and web content and use both a video game console and cell phone in university classes.

DISCUSSION

Regarding the first research question, data suggest that faculty members do not inaccurately estimate student media competencies. Regarding the second research question, data suggest that faculty members perceive teaching about media literacy competencies at rates significantly higher than students report learning about media literacy competencies. Regarding the third research question, data suggest that faculty members and students agree that media literacy education is important at the university level. These findings led to the identification of some additional, relevant issues associated with the practice of media literacy education at the university level.

Faculty Overestimate the Extent of Media Literacy Course Work

Faculty members generally suggested that they teach about media literacy competencies in their classes. However, students were much less likely to report that they have been exposed to course work associated with media literacy. Furthermore, when provided with the opportunity to write about the specific media-related activities in which they engage in class, comments only addressed media use related to academic research. Not a single faculty member provided an example of a classroom activity associated with media creation or analysis. As such, the possibility exists that faculty members overestimate the extent to which media literacy competencies are addressed in their classes.

Furthermore, the possibility exists that there is a difference between what students consider to be "learning" about media and what faculty members consider to be "teaching" about media. Students may be suggesting that they expect a more structured, sequential learning experience to feel that they have truly learned about media competencies. This suggests that even if media literacy competencies are briefly addressed in class, it may be necessary to devote more time and class resources to them to facilitate actual student learning.

This finding supports Christ's (2004) assertion that it is necessary for media educators to shift away from assessing their curricula by asking "what do we teach?" and instead evaluate their lessons based on the question "what have students learned?" Wrote Christ, "Saying we teach media literacy is different than demonstrating that our students are media literate. A student learning–outcomes approach to assessment requires a paradigm shift for many educators" (p. 95).

Traditional Media Privileged

Activities associated with locating text-based media were among the few topics that both faulty members and students identified as being addressed in university classes and as being important for university students to learn about. Furthermore, the only skill that students reported learning about progressively throughout their time in university involved locating print resources. This suggests that a special emphasis is continuing to be placed on traditional media. Addressing traditional media is certainly appropriate and remains relevant to developing a broad set of literacy competencies, including those associated with media literacy. However, doing so at the exclusion of new and multimodal media suggests that class topics may not be fully relevant within the modern media landscape, which increasingly involves the use of new media (Buckingham, 2007b; Metzger & Flanagin, 2007; Mossberger, Tolbert, & Stansbury, 2008). This may again suggest a lack of familiarity on the part of

faculty members when it comes to teaching about new media that they may infrequently use themselves and for which they likely received no formal training in the past (Schmidt, 2012).

Already, research has identified similar issues among teachers at the K–12 level. For instance, research has found that high school teachers are interested in teaching about media literacy competencies yet feel that they need further media training (Hart, 1998) to be confident or capable (Prewett & Stein, 2006). Furthermore, plans have been suggested for the integration of media literacy training into the preservice teacher education programs that train K–12 educators (Considine, 2004; Schwartz, 2001, 2005; Tuggle, Sneed, & Wulfemeyer, 2000; Tyner, 1992).

Data from this study suggest that university-level instructors have a similar need for media-related professional development. As such, it is important for institutions of higher education to increase training for their own faculty members (Goetze, Brown, & Schwarz, 2005), while also focusing on new ways to integrate media literacy–related training into the graduate programs that train the next generation of the professorate. Such training can help educators in this country to better build on their existing enthusiasm regarding media literacy and further develop a sense of "ownership and autonomy" (Considine, 2002, p. 13) that can drive further innovation and growth.

Widespread Support of Media Literacy's Importance, Uncertain Extent of Course Work

Both student and faculty participants expressed widespread recognition of the importance of learning about media literacy competencies in university-level courses. However, despite such widespread and clear support for media literacy course work—and the finding that students and faculty members apparently identify such competencies as relevant for academic and professional development—student responses suggested that media competencies are

likely not being addressed in a systematic fashion within classes. This suggests that there is a recognized need that is currently not being fully addressed.

Such a finding takes on special significance considering the increasing need to focus on the interdisciplinary integration of media literacy course work across the curriculum. As Hobbs (2011) suggested, education is rapidly moving toward an acknowledgment that "silos of knowledge" and narrow specialties are increasingly irrelevant for the modern world. Instead, students need to learn to integrate media literacy competencies across the curriculum, in a wide variety of courses. Yet, to achieve such a forward-thinking goal, and meet the type of educational objectives that are increasingly being recognized, it will be necessary for scholars and educational practitioners to continue working to ensure that the acknowledgment of the importance of media literacy translates into educational practice across the curriculum.

To do this, a combination of individual creativity and improved assessment might be valuable. Considine (2002) suggested that media literacy needs to be driven by educators and that such a teacher-led model allows for the most innovation. Nevertheless, for the less experienced and less media savvy, more structured guidelines can be helpful. To this end, Hobbs (2011) suggested that there is a need to develop new assessment paradigms to better evaluate the extent and effectiveness of media literacy educational experiences. By developing better methods of assessment, it may be easier for educators to more clearly identify when they are actually adequately addressing the media competencies that are already being identified as so important.

Topics Addressed in Class Are Perceived as Unimportant, Whereas Topics Perceived as Important Are Seldom Addressed

Further suggesting that media literacy course work often lacks systematic planning—and instead is included as an afterthought—is

the finding that faculty participants report teaching about topics that they do not rate as especially important. For instance, faculty participants expressed widespread agreement that they teach about very basic and entertainment-centered media uses. However, faculty participants expressed little support for the importance of addressing such topics in university-level classes. Instead, the topics that faculty participants reported perceiving as most important, including those related to media analysis, were addressed infrequently in class. As such, a disconnect clearly exists between what is currently being addressed and what faculty members and students believe should be addressed. This finding points in two directions.

First, it again highlights the need for increased faculty training and more clear planning associated with media literacy course work. Second, this finding also speaks to the continually fragmented nature of media literacy education within the American educational system. Much has been done in recent years to develop more coherent plans and identify which specific types of competencies are most relevant for students to develop. For instance, nearly 15 years ago, the National Communication Association (1998) developed media literacy standards for K–12 educators, and since that time, all 50 states have adopted standards for some type of media education at the K–12 level (Heins & Cho, 2003; Kubey, 2004; Kubey & Baker, 1999; Yates, 2004). However, such uniform standards do not exist for institutions of higher education, for which curricula are established locally, not by a state department of education, on the basis of a variety of factors ranging from faculty expertise to national or international discipline-specific norms.

Furthermore, no communication or media associations have directly addressed media literacy guidelines for higher education within the United States. The Accrediting Council on Education in Journalism and Mass Communications (ACEJMC; 2012) has come the closest to issuing any such guidelines. Although the ACEJMC never actually uses the term *media literacy,* it has established a set

of "core values and competencies" that are related to media creation and analysis (ACEJMC, 2012). However, such guidelines are used only by professionally focused media and journalism programs. Educators in other branches of communication studies, or in other disciplines, may be fully unaware of such standards. As such, media literacy may continue to be addressed in an ad hoc fashion. The growth of more clear media literacy educational objectives and standards for postsecondary educators could help to improve the focus of media literacy lessons and reduce the unintentional focus on irrelevant or unimportant topics (Christ, 2004).

CONCLUSION

Media literacy competencies are necessary for full participation in the modern world, and it will be increasingly necessary for today's university students to possess a wide array of media competencies to succeed personally and professionally after graduation. This point has been demonstrated in existing research (Holland et al., 2003; Sefton-Green, 2006; Snyder & Beavis, 2004) and is further suggested by faculty and student perspectives in this study. However, media literacy course work appears to be very limited within higher education, and a disconnect remains between what individuals feel needs to be learned and what students are actually learning.

Data from this study suggest that the slow growth of media literacy course work is not due to an overestimation of student competencies. Rather, it may be an overestimation of the extent to which media literacy is currently addressed that leads to the slow adoption of further media literacy course work.

This overestimation of the extent to which media literacy competencies are addressed in class may be due to a lack of media savvy among existing teaching faculty or a lack of understanding about what teaching about media literacy actually involves. Interviews with high school teachers (Hart, 1998) and university instructors

(Schmidt, 2012) have shown that faculty members are often unfamiliar with media technologies and, as such, avoid them in their classes. As long as this unfamiliarity and discomfort exist, faculty members may continue to overestimate the extent of media-related instruction, and essential media literacy competencies will likely remain neglected or relegated to an isolated corner of the curriculum.

Accordingly, increasing the availability of media-related training is necessary. Yet, having technically proficient faculty members is not a solution in itself. It will also be necessary to find a home for media literacy course work within university-level curricula. Different perspectives exist in this regard. Some institutions have turned toward developing unique media literacy courses, housed in a variety of disciplines, ranging from communication to education. However, even more popular is the interdisciplinary approach, in which media literacy competencies are embedded into the objectives of courses across the curriculum. Either approach can be successful; the key is to develop a clear plan and establish guidelines and standards for both teaching and evaluation. By developing such a plan, and raising continued awareness of the importance of such competencies, it can be possible to better meet the needs of the next generation of university graduates.

REFERENCES

Accrediting Council for Education in Journalism and Mass Communication. (2012). *Accrediting standards*. Retrieved from http://www2.ku.edu/~acejmc/PROGRAM/STANDARDS.SHTML

American Library Association. (2012). *Information literacy competency standards for higher education*. Retrieved from http://www.ala.org/acrl/standards/informationliteracycompetency#ildef

Arbitron. (2011). *The infinite dial 2011: Navigating digital platforms*. Retrieved from http://www.arbitron.com/downloads/infinite_dial_2011_presentation.pdf

Ascher, S., & Pincus, E. (1984). *The filmmaker's handbook: A comprehensive guide for the digital age.* New York: Penguin.

Bergsma, L. J. (2004). Empowerment education: The link between media literacy and health promotion. *American Behavioral Scientist, 48*(2), 152–164.

Buckingham, D. (1998). Media education in the UK: Moving beyond protectionism. *Journal of Communication, 48*(1), 33–42.

Buckingham, D. (2007a). Digital media literacies: Rethinking media education in the age of the Internet. *Research in Comparative and International Education, 2*(1), 43–45.

Buckingham, D. (2007b). Media education goes digital: An introduction. *Learning, Media, and Technology, 32*(2), 111–119.

Caruso, J. B., & Salaway, G. (2007). *The ECAR study of undergraduate students and information technology, 2007.* Boulder, CO: Educause Center for Applied Research. Retrieved from http://net.educause.edu/ir/library/pdf/ERS0706/ekf0706.pdf

Christ, W. G. (2004). Assessment, media literacy standards, and higher education. *American Behavioral Scientist, 48*(1), 92–96.

Claussen, D. S. (2004). Cognitive dissonance, media illiteracy, and public opinion on news media. *American Behavioral Scientist, 48*(2), 212–218.

Considine, D. (2002). Media literacy: National developments and international origins. *Journal of Popular Film and Television, 30*(1), 7–15.

Considine, D. (2004). "If you build it, they will come": Developing a graduate program in media literacy in a college of education. *American Behavioral Scientist, 48*, 97–107.

Daunic, R. (2011). 10 years of media literacy education in K–12 schools. *Journal of Media Literacy Education, 3*(1), 209–210.

Duran, R. L., Yousman, B., Kaitlin, M. W., & Longshore, M. A. (2008). Holistic media education: An assessment of the effectiveness of a col-

lege course in media literacy. *Communication Quarterly, 56*(1), 49–68.
Fedorov, A. (2003). *Media education and media literacy: Experts' opinions. MENTOR: A Media Education Curriculum for Teachers in the Mediterranean.* Paris: UNESCO.
Freire, P., & Macedo, D. (1987). *Literary: Reading the word and the world.* Westport, CT: Bergin and Garvey.
Galician, M. L. (2004). Introduction: High time for "dis-illusioning" ourselves and our media: Media literacy in the 21st century. *American Behavioral Scientist, 48*(1), 7–17.
Goetze, S. K., Brown, D. S., & Schwarz, G. (2005). Teachers need media literacy, too! *Yearbook of the National Society for the Study of Education, 104*, 161–179.
Hart, A. (1998). Conclusion: Paradigms revisited. In A. Hart (Ed.), *Teaching the media: International perspectives* (pp. 169–196). Mahwah, NJ: Erlbaum.
Heins, M., & Cho, C. (2003). *Media literacy: An alternative to censorship.* New York: Free Expression Policy Project. Retrieved from http://www.fepproject.org/policyreports/medialiteracy.pdf
Hobbs, R. (1998). The seven great debates in the media literacy movement. *Journal of Communication, 48*(1), 6–32.
Hobbs, R. (2004). A review of school-based initiatives in media literacy education. *American Behavioral Scientist, 48*(1), 42–59.
Hobbs, R. (2011). What a difference ten years can make: Research possibilities for the future of media literacy education. *Journal of Media Literacy Education, 3*(1), 29–31.
Holland, W., Jenkins, H., & Squire, K. (2003). Theory by design. In B. Perron & M. Wolf (Eds.), *Video game theory* (pp. 25–46). New York: Routledge.
Jenkins, H. (2006). *Convergence culture: Where old and new media collide.* New York: New York University Press.
Jeong, S., Cho, H., & Hwang, Y. (2012). Media literacy interventions: A meta-analytic review. *Journal of Communication, 62*, 454–472.
Katz, R. N. (2006). Foreword. In G. Salaway, R. N. Katz, J. B. Caruso, R. B. Kvavik, & M. R. Nelson (Eds.), *The ECAR study of undergraduate students and information technology, 2006* (pp. 5–7). Boulder, CO: Educause.
Kellner, D. (2002). New media and new literacies: Reconstructing education for the new millennium. In L. Lievrouw & S. Livingston (Eds.), *The handbook of new media* (pp. 90–104). London: Sage.
Koltay, T. (2011). The media and the literacies: Media literacy, information literacy, digital literacy. *Media, Culture, and Society, 33*(2), 211–221.

Kubey, R. W. (2004). Media literacy and the teaching of civics and social studies at the dawn of the 21st century. *American Behavioral Scientist, 48*(1), 69–77.

Kubey, R., & Baker, F. (1999). Has media literacy found a curricular foothold? *Education Week, 19*, 56.

Lewis, J., & Jhally, S. (1998). The struggle over media literacy. *Journal of Communication, 48*(1), 109–120.

Livingstone, S. (2004). Media literacy and the challenges of new communication technologies. *Communication Review, 1*(7), 3–14.

Lund, D. J. (1998). Video production in the English language arts classroom. *The English Journal, 87*(1), 78–82.

Martens, H. (2010). Evaluating media literacy education: Concepts, theories and future directions. *Journal of Media Literacy Education, 2*(1), 1–22.

Maughan, P. D. (2001). Assessing information literacy among undergraduates: A discussion of the literature and the University of California–Berkeley assessment experience. *College and Research Libraries, 62*(1), 71–85.

Metzger, M. J., & Flanagin, A. J. (2007). *Digital media, youth, credibility.* Cambridge, MA: MIT Press.

Mihailidis, P. (2006). Media literacy in journalism/mass communication education: Can the United States learn from Sweden? *Journalism and Mass Communication Educator, 60*(4), 416–428.

Mossberger, K., Tolbert, C. J., & Stansbury, M. (2008). *Digital citizenship: The Internet, society, and participation.* Cambridge, MA: MIT Press.

National Association for Media Literacy Education. (2011). *Media literacy defined.* Retrieved from http://namle.net/publications/media-literacy-definitions/

National Communication Association. (1998). *Speaking, listening, and media literacy standards for K though 12 education.* Washington, DC: National Communication Association.

New London Group. (1996). A pedagogy of multiliteracies: Designing social futures. *Harvard Educational Review, 66*(1), 60–92.

Norris, P. (2001). *Digital divide: Civic engagement, information poverty, and the Internet worldwide.* Cambridge: Cambridge University Press.

O'Brien, A. (2005). Filmmaking across the curriculum. *Screen Education, 38*, 87–90.

Potter, W. J. (2004). *Theory of media literacy: A cognitive approach.* Thousand Oaks, CA: Sage.

Potter, W. J. (2010). The state of media literacy. *Journal of Broadcasting and Electronic Media, 54*(4), 675–696.

Prewett, A., & Stein, L. (2006). *Media education in the social studies class-*

room: Teacher perceptions and curricular challenges. Paper presented at the 56th annual conference of the International Communication Association, Dresden, Germany.

Rice, R. (2002). Primary issues in Internet use: Access, civic and community involvement, and social interaction and expression. In L. Lievrouw (Ed.), *Handbook of new media: Social shaping and consequences of ICTs* (pp. 105–129). London: Sage.

Saettler, P. (1990). *The evolution of American educational technology.* Englewood, CO: Libraries Unlimited.

Schmidt, H. C. (2012). Essential but problematic: Faculty perceptions of media literacy education at the university level. *Qualitative Research Reports in Communication, 13*(1), 10–20.

Scholes, R. (1998). *The rise and fall of English.* New Haven, CT: Yale University Press.

Schwartz, G. (2001). Literacy expanded: The role of media literacy in teacher education. *Teacher Education Quarterly, 28*(2), 111–119.

Schwarz, G. (2005). Obstacles, challenges, and potential: Envisioning the future. In G. Schwarz & P. Brown (Eds.), *Media literacy: Transforming curriculum and teaching* (pp. 229–250). Chicago: National Society for the Study of Education.

Sefton-Green, J. (Ed.). (1999). *Young people, creativity, and new technologies: The challenge of digital arts.* London: Routledge.

Sefton-Green, J. (2006). Youth, technology, and media cultures. *Review of Research in Education, 30*, 279–306.

Silverblatt, A., Baker, F., Tyner, K., & Stuhlman, L. (2002). *Media literacy in U.S. institutions of higher education.* Retrieved from http://www.webster.edu/medialiteracy/survey/survey_Report.htm

Silverblatt, A., Ferry, J., & Finan, B. (2004). *Approaches to media literacy: A handbook.* Armonk, NY: M. E. Sharpe.

Silverstone, R. (2004). Regulation, media literacy, and media civics. *Media, Culture, and Society, 26*(3), 440–449.

Snyder, I., & Beavis, C. (2004). *Doing literacy online: Teaching, learning, and playing in an electronic world.* Creskill, NJ: Hampton Press.

Stuhlman, L., & Silverblatt, A. (2007). *Media literacy in U.S. institutions of higher education: Survey to explore the depth and breadth of media literacy education*. Retrieved from http://www.webster.edu/medialiteracy/

Television Bureau of Advertising. (2010). *Media comparisons study 2010*. Retrieved from http://www.tvb.org/media/file/TVB_PB_Media_Comparisons_2010_PERSONS.pdf

Thoman, E., & Jolls, T. (2004). Media literacy—A national priority

for a changing world. *American Behavioral Scientist, 48*(1), 18–29.

Tuggle, C. A., Sneed, D., & Wulfemeyer, K. T. (2000). Teaching media studies as high school social science. *Journalism and Mass Communication Educator, 54*(4), 67–76.

Tyner, K. (1992). The tale of the elephant: Media education in the United States. In C. Bazalgette, E. Bevort, & J. Savion (Eds.), *New directions: Media education worldwide* (pp. 170–176). London: British Film Institute.

Williams, S. H., & Medoff, N. J. (1997). Production. In W. G. Christ (Ed.), *Media education assessment handbook* (pp. 235–254). Hillsdale, NJ: Erlbaum.

Wulff, S. (1997). Media literacy. In W. G. Christ (Ed.), *Media education assessment handbook* (pp. 123–142). Hillsdale, NJ: Erlbaum.

Yates, B. L. (2004). Media literacy and the policymaking process: A framework for understanding influences on potential educational policy outputs. *SIMILE: Studies in Media and Information Literacy Education, 4*(1), 1–14.

Communicating Paranormal Belief: An Investigation of the Relationships Among Personality Temperaments, Paranormal Belief, and Lie Acceptability

MATTHEW C. RAMSEY
Shippensburg University

WILLIAM A. MAZE
Northwest Mississippi Community College

This study examined the associations among personality temperaments (psychoticism, extraversion, and neuroticism), paranormal belief, and lie acceptability via regression analyses. Participants were ($N = 252$) students enrolled in a large southern university in the United States. The results support participant neuroticism scores as a predictor of participant paranormal belief scores; participant neuroticism and psychoticism scores were observed as positive predictors of participant lie acceptability scores. Last, participant lie acceptability was observed as a significant predictor of participant paranormal belief. The key findings support the communibiological perspective, which contends that enduring biological personality factors can meaningfully predict communication variables.

KEYWORDS: Communibiology, lie acceptability, paranormal belief

Over the past 25 years, scholars have indicated that the United States has experienced a revival (Grimmer, 1992) of paranormal belief, "a belief in one or more extraordinary phenomena that defy explanation" (Sparks & Miller, 2001, p. 98). Our society's desire for the paranormal is evident in media consumption. Popular movies

Matthew C. Ramsey, Ph.D., is an assistant professor at the Department of Human Communication Studies, Shippensburg University. He can be reached at 112 Dauphin Humanities Center, Shippensburg University, Shippensburg, PA 17257 or at mcramsey@ship.edu. William A. Maze, Ph.D., is a speech instructor at the Department of Fine Arts, Northwest Mississippi Community College.

and television shows, such as *A Haunting in Connecticut* (Brooks, Farrands, & Cornwell, 2009), *American Ghost Hunter* (Buell & Calek, 2010), the *Paranormal Activity* series (Blum, Peli, Schneider, Joost, & Schulman, 2011; Blum, Peli, & Williams, 2010; Peli, 2007), *Ghost Hunters* (Katz, 2004), *Paranormal State* (Sasson, 2007), *The Ghost Whisperer* (Moses, 2005), *Paranormal Cops* (Walsh, 2009), *Psychic Kids: Children of the Paranormal* (Bozak, 2007), *My Ghost Story* (Masek, 2010), *Paranormal Challenge* (Green, 2011), *Ghost Adventures* (Groff, 2008), and numerous others, are financially successful and have large fan bases throughout the United States.

Motion pictures and television are not the only media outlets inundated with the promotion of the paranormal. Popular websites sponsored by the Atlantic Paranormal Society (2012), the Paranormal Research Society (2012), and the American Ghost Society (2012) have myriad visitors, group members, and strong fan support. Likewise, recent works of nonfiction, such as *Psychic Children* (Browne, 2007), *Psychic: My Life in Two Worlds* (Browne, 2010), *Ghosts of the McBride House: A True Haunting* (Back, 2009), and *Seeking Spirits: The Lost Cases of the Atlantic Paranormal Society* (Hawes, Wilson, & Friedman, 2009), continue to fuel recent interest in the paranormal.

Previous research conducted on university undergraduates found that approximately 50% of the respondents believe in ghosts and 40% believe in the accuracy of palm readings (Sparks, Hansen, & Shah 1994). More recently, Ramsey, Venette, and Rabalais (2011) found that almost 30% of their undergraduate sample claimed to have had at least one previous paranormal experience. Such claims leave skeptics to wonder if people are truly experiencing paranormal phenomena, but questions regarding the veracity of messages pertaining to supposed paranormal events can lead to contentiousness between believers and nonbelievers. Are paranormal experiences real? Are people merely lying about such experiences for attention or social influence? As previous research has noted,

many individuals often view lying and deceit "as a communicative means to achieving personal and social goals" (Oliveira & Levine, p. 282). McCornack and Levine (1990) labeled this phenomenon *lie acceptability.* Can lie acceptability account for paranormal belief or reported paranormal phenomena? Or are paranormal experiences merely by-products of personality factors and social experiences? Such questions have encouraged academics from multiple disciplines to examine social scientific variables and individual levels of paranormal belief (see King, Burton, Hicks, & Drigotas, 2007; Ramsey et al., 2011; Sharps, Matthews, & Asten, 2006; Sparks & Miller, 2001; Sparks, Nelson, & Campbell, 1997; Tobacyk & Milford, 1983; Wiseman & Watt, 2006). Accounting for individual differences regarding paranormal belief is a daunting task, yet one theoretical perspective, the communibiology paradigm, may hold promise for scholars desiring to research paranormal belief.

Communibiology, as an academic term, was first introduced through the works of Beatty, McCroskey, and Heisel (1998) and McCroskey (1997). The term refers to the belief that communicative abilities are based in hereditability and are not merely a product of socialization and education. Though McCroskey is credited with conceptualizing this theoretical perspective, psychologists have examined the biological underpinnings of beliefs and behaviors since the infancy of their discipline. Similar to psychology, the communibiological paradigm is recent only in *name* to the discipline of communication studies. As early as the 1970s, Behnke, Carlile, and Lamb (1974) examined psychological trait–based anxiety experienced by public speaking students. In recent years, proponents of communibiology have focused research efforts on the examination of personality temperaments in relation to communication variables (see Beatty et al., 1998; Beatty & Valencic, 2000; Kelly & Keaten, 2000; Wrench, Brogan, McCroskey, & Jowi, 2008; Wrench & McCroskey, 2001). Noting that previous research supports individual personality temperaments as meaningful

predictors of beliefs and communication, this study seeks to understand if biologically determined personality temperaments account for individual paranormal belief and lie acceptability levels.

LITERATURE REVIEW

Paranormal Belief

Previous research has established paranormal belief as a multidimensional construct (Tobacyk & Milford, 1983). Tobacyk and Milford conceptualized the dimensions to include *traditional religious belief* (e.g., belief in god), *psychic phenomena* (e.g., a person being able to influence the movement of physical objects), *witchcraft* (e.g., the practice of spell casting), *superstition* (e.g., the number 13 being unlucky), *spiritualism* (e.g., reincarnation existing), *extraordinary life forms* (e.g., bigfoot and the Loch Ness monster), and *precognition* (e.g., being able to predict the future). While traditional religious belief is considered a dimension of paranormal belief, some scholars argue that traditional religious belief should be measured as a distinct construct because society is more accepting of such beliefs (Ganiel & Mitchell, 2006; A. F. Smith & Simmonds, 2006). Yet scholars have observed a direct relationship between religiosity and paranormal belief (see Aarnio & Lindeman, 2007; Clark, 2002; Hergovich, Schott, & Arendasy, 2005). Though often cautious, research still reports traditional religious belief as a category of paranormal belief.

Furthermore, previous research has supported paranormal belief as a variable affected by media influence (Sparks & Miller, 2001; Sparks et al., 1997), narrative suggestibility, and source credibility (Ramsey et al., 2011). Other variables, such as lowered reasoning abilities (Hergovich & Arendasy, 2005), emotional wellness (Simonian, 2011), hypnotic suggestibility (Hergovich, 2003), schizotypy in adolescents (Hergovich, Schott, & Arendasy, 2008), dissociation (Irwin, 1994), emotional abuse (Rabeyron & Watt, 2010), openness

to experiences and sensation seeking (C. L. Smith, Johnson, & Hathaway, 2009), and personality factors such as absorption and fantasy proneness (Kennedy, 2005), have been linked to heightened levels of paranormal belief. Because previous research has supported individual personality factors as variables associated with paranormal belief, a thorough examination of paranormal belief and personality temperaments may help account for individual levels of paranormal belief.

Communibiological Paradigm

As previously mentioned, communibiological theorists propose that heritability is causally linked to communicative beliefs and behaviors (Beatty & McCroskey, 2009; McCroskey, 1997). In other words, genetics substantially predetermine how individuals communicate. In studies involving siblings and twins, heredity has been observed to be a meaningful predictor of communication anxiety and communication apprehension (see Beatty, Heisel, Hall, Levine, & La France, 2002; Beatty & McCroskey, 2009). A key view of communibiology is that all communicative experiences are established by brain function; therefore all communicative experiences must be consistent with the known operations of the brain (Beatty et al., 1998).

Noting that heritability is an influential factor of communication, communibiological scholars have focused their efforts on measuring the impact of biology on a variety of communication variables. Scholars are able to do this by examining temperaments, "ways in which individuals can interact" (H. J. Eysenck, 1986, p. 14). Temperaments are accurate measures of biologically driven personality functions owing to their strong correspondence to major neurobiological systems (Beatty & McCroskey, 2009). As measures of temperament, communibiological scholars have adopted H. J. Eysenck's (1956, 1978, 1986) three-factor model. According to Beatty and McCroskey (2009), Eysenck's model was adopted by

communibiological scholars for three reasons: (a) Eysenck's temperaments have been widely tested across cultures, (b) his temperaments are directly related to communication in general and to communication anxiety, and (c) his temperaments correspond well with neurobiological systems (Gray, 1991). H. J. Eysenck's (1956, 1978, 1986) three-factor model is also known as the *Big Three* and includes the following traits: psychoticism, extraversion, and neuroticism.

The first of the Big Three, *psychoticism,* refers to how willing or unwilling an individual is to follow society's rules and norms. A highly psychotic person would think that society's rules do not apply to him or her (H. J. Eysenck & Eysenck, 1976). People exhibiting high levels of psychoticism are typically loners, insensitive, and willing to engage in dangerous behavior (S. B. Eysenck, Eysenck, & Barrett, 1985). Understanding that psychotics have low regard for traditional societal norms and rules, a highly psychotic person could be attracted to paranormal belief because such beliefs deviate from conventional viewpoints. However, extant research has indicated an imprecise connection between psychoticism and paranormal belief. Scholars have found direct relationships between psychoticism and belief in UFOs, heaven, hell, ghosts, and life on other planets (Lester, 1993). In contrast, Williams, Francis, and Robbins (2007) reported no significant relationship between paranormal belief and psychoticism, yet more recent findings have indicated that the *type* of paranormal belief may determine the association with psychoticism (Robbins, Francis, & Williams, 2010). Robbins and colleagues found that conventional religious beliefs are negatively related to psychoticism, while unconventional paranormal belief is positively related to psychoticism. Such findings offer more support for the exclusion of traditional religious beliefs from other forms of paranormal belief (Ganiel & Mitchell, 2006; A. F. Smith & Simmonds, 2006). As noted, inconsistent findings exist regarding the relationship between paranormal belief and psychoticism; thus the following subdivided research question was proposed:

RQ1A: Do participant psychoticism scores (combined subscales) predict participant paranormal belief scores?

RQ1B: To what extent does participant scoring variance for the traditional religious belief subscale of the Paranormal Belief Scale affect the observed empirical association between participant psychoticism scores and participant paranormal belief scores?

Extraversion, the second temperament, refers to an individual's willingness to engage in social stimulation (S. B. Eysenck et al., 1985). Extraverts are often thought to be the life of a party in social settings. Extraverts are typically viewed as socially attractive, outgoing, and venturesome (H. J. Eysenck & Eysenck, 1985; H. J. Eysenck & Eysenck, 1976; Ruch, 1994). To an extravert, belief in the paranormal may only be attractive if such beliefs enhance social interaction. Because deviant views may lead to exclusion, extraverts are likely cautious when vocalizing belief in the paranormal. Previous research has failed to empirically connect extraversion to paranormal belief (see Svensen, White, & Caird, 1992; Williams et al., 2007). However, with the mainstreaming of paranormal belief through popular reality shows, books, and other media, extraverts may be given to high levels of paranormal belief. Noting this possibility and the frequent segregation of traditional religious belief from other forms of paranormal belief, the following subdivided research question was proposed:

RQ2A: Do participant extraversion scores predict participant paranormal belief scores?

RQ2B: To what extent does participant scoring variance for the traditional religious beliefs subscale of the Paranormal Belief Scale affect the observed empirical association between participant extraversion scores and participant paranormal belief scores?

The last of the three temperaments is *neuroticism.* People who exhibit high levels of neuroticism frequently experience worry and

negative emotion. Likewise, they may be considered emotionally unstable and more likely to experience panic attacks, anxiety, and depression than people who report lower levels of neuroticism (H. J. Eysenck, 1998). Scholars have found that individuals exhibiting high levels of neuroticism are given to stronger superstitious beliefs, a subdimension of paranormal belief and overall paranormal belief (Dagnall, Parker, & Munley, 2007; Williams et al., 2007; Wiseman & Watt, 2004). Similarly, previous empirical work examining adolescent participants found a direct relationship between neuroticism and paranormal belief (Quesnell, 2000). More currently, Williams et al. (2007) reported neuroticism to be the only one of H. J. Eysenck's (1956, 1978) temperaments to be related to paranormal belief. Scholars have offered two explanations for the association between neuroticism and paranormal belief. The first perspective suggests that illogical belief in the paranormal (McCrae & Costa, 1987) may console people exhibiting high levels of neuroticism by explaining life events and "quelling their disposition for over-emotionality" (Williams et al., 2007, p. 13). Second, and in opposition, paranormal belief could be a consequence of a neurotic's tendency to be overly emotional (Williams et al., 2007). Noting the previous theoretical and empirical support for neuroticism being related to paranormal belief, Hypothesis 1 was proposed:

H1: Participant neuroticism scores will positively predict participant paranormal belief scores (combined subscales).

Considering that traditional religious belief can be differentiated from paranormal belief, a follow-up research question was proposed:

RQ3: To what extent does participant scoring variance for the traditional religious belief subscale of the Paranormal Belief Scale affect the observed empirical association between participant neuroticism scores and participant paranormal belief scores?

Lie Acceptability

Historically, the elements of trust and integrity have been central to communication contexts, dating back to the ancients (Aristotle, 2006) and more recently in interpersonal settings (Watzlawick, Beavin, & Jackson, 1967). Regardless of context, deception has the potential to undermine the respect and trust shared between or among persons. Scholars from many disciplines have examined the existence of deception and lying and their frequency in relationships (see DePaulo, Kashy, Kirkendol, Wyer, & Epstein, 1996; Ford, King, & Hollender, 1988; Lewis & Saarni, 1993). Few would argue that lying is desirable, yet studies have revealed that lying and deception are commonplace in a variety of interpersonal situations (Metts & Chronis, 1986; Tyler & Feldman, 2004). Many people "view deception as one of many viable [communicative] tactics" (Oliveira & Levine, 2008, p. 283). As previously addressed, this view has been labeled *lie acceptability* (McCornack & Levine, 1990). Lie acceptability is a construct where deceit is seen "as a communicative means to achieving personal and social goals" (Oliveira & Levine, 2008, p. 282). As much as 25% of interpersonal interactions are marked with deceit, according to research; experimental studies have revealed that 60% of strangers engage in deceptive behavior at least once during the course of a 10-minute encounter (see DePaulo et al., 1996; George & Robb, 2008; Feldman, Forrest, & Happ, 2002).

Though a willingness to use deception as a communicative tool is commonplace, the reasons for such an act vary. As Turner, Edgley, and Olmstead (1975) noted, individuals use lies to save face, control social situations, and ward off conflict. Other scholars have contended that lies can be used to escape reality or contest perceived imbalances of power (van Dongen, 2002). Scholarship has suggested that specific personality variables (honesty, kindness, etc.) can predict lie types (altruistic, conflict avoidance, etc.) (McLeod & Genereux, 2008). Previous psychobiology research has found that two of H. J. Eysenck's (1956, 1978, 1986) three

temperaments, psychoticism and neuroticism, were observed in a direct relationship with lying (Abel, 2008). Research has suggested that individuals reporting high levels of neuroticism may use lying as a means of escaping reality and avoiding an extra influx of negative emotions, which are often associated with affinity-reducing conflicts (Richmond & McCroskey, 2009). Noting past associations between neuroticism and lying (Abel, 2008), Hypothesis 2 was proposed:

H2: Participant neuroticism scores will positively predict participant lie acceptability scores.

Unlike people who report high levels of neuroticism, people exhibiting high levels of psychoticism may use lying for the communicative upper hand (van Dongen, 2002) or an ability to deceptively control others' behaviors. Research has supported that individuals reporting high levels of psychoticism have little regard for the feelings of others (S. B. Eysenck et al., 1985), so lying may be viewed as an appealing tool for social manipulation. Likewise, psychotics may use lying and deception as a communicative means to hide dangerous behaviors from others. Previous research has observed psychoticism in a positive relationship with lying (Abel, 2008). Thus Hypothesis 3 was proposed:

H3: Participant psychoticism scores will positively predict participant lie acceptability scores.

Regarding paranormal belief and lie acceptability, the truthfulness of messages related to supposed paranormal experiences is often scrutinized by individuals who consider the paranormal absurd. Moreover, determining the *factual* truth of a paranormal event is not probable, and previous academic research has failed to clearly address the relationship between these two variables. Extant research has indicated that paranormal belief and lying are not

significantly related (Williams et al., 2007). Yet Francis and Williams (2009) found lowered social conformity, a variable closely linked to lying and deception, to be associated with paranormal belief. Though previous research has offered imprecise empirical support, speculation about the veracity of reported paranormal events abounds. Witnesses of paranormal events often hold fast to the belief that their personal experiences are *evidence* of the paranormal. Meanwhile, skeptics question believers' experiences, motives, intellect, and honesty. This scenario is played out weekly for national audiences on popular reality television programs such as *Ghost Adventures* (Groff, 2008) and *Ghost Hunters* (Katz, 2004). Are people who claim to have had paranormal experiences merely lying? Are their experiences simply psychosomatic? Answering such questions would be a wooly and inexact task. Nevertheless, understanding the association between lie acceptability and paranormal belief will offer insight into the greater societal dialogue regarding paranormal belief and lying. Thus the following subdivided research question was proposed:

RQ4A: Do participant lie acceptability scores predict participant paranormal belief scores?

RQ4B: To what extent does participant scoring variance for the traditional religious belief subscale of the Paranormal Belief Scale affect the observed empirical association between participant lie acceptability scores and participant paranormal belief scores?

METHOD

Participants

Undergraduate students (N = 252) from a large southern university volunteered to participate in the study (n = 128 women; n = 124 men). The participants were enrolled in introductory

communication courses. The participants' ages ranged from 18 to 55 years (M = 21.14, SD = 4.27). The religious demographics of the participants were as follows: Protestant Christian (n = 170, 67.5%), Roman Catholic (n = 28, 11.1%), spiritual but not religious (n = 17, 6.7%), agnostic (n = 12, 4.8%), atheist (n = 11, 4.4%), other (n = 6, 2.4%), Muslim (n = 4, 1.6%), Hindu (n = 2, .8%), Buddhist (n = 1, 0.4%), and Jewish (n = 1, 0.4%). The six participants who classified themselves as "other" failed to identify their belief systems. The participants were asked if they had had a previous paranormal experience; n = 69 (27.4%) participants responded yes, and n = 183 (72.6%) participants replied no.

Procedure

After receiving Institutional Review Board approval for human participant research, participants were solicited during their regularly scheduled communication class sessions. Participants were informed of their rights and were given an opportunity to ask questions about their participation. After participant questions and/or concerns were resolved, each participant was asked to complete a packet of scales containing (in received order) a demographic cover page, Tobacyk and Milford's (1983) Paranormal Belief Scale (PBS), S. B. Eysenck et al.'s (1985) revised Personality Questionnaire, and Oliveira and Levine's (2008) Lie Acceptability Scale. After the participants completed the packets, the researchers collected the measures. The participants were thanked for their time and participation.

Instrumentation

Paranormal Belief Scale. To measure paranormal belief, Tobacyk and Milford's (1983) 25-item PBS was used. The scale measures paranormal belief via seven subscale factors. Each PBS item was assessed via a 5-point Likert-type scale rating ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The current reliability assessment of each subscale produced good to excellent internal consistency

scores: Traditional Religious Belief (e.g., I believe in God [α = .86]), Psychic Phenomena (a person's thoughts can influence the movement of a physical object [α = .93]), Witchcraft (black magic really exists [α = .94]), Superstition (the number 13 is unlucky [α = .91]), Spiritualism (reincarnation does occur [α = .82]), Extraordinary Life Forms (bigfoot exists [α = .91]), and Precognition (the idea of predicting the future is sensible [α = .86]). The overall participant scale ratings were moderate (M = 2.54, SD = .69). The current reliability assessment produced stronger internal consistency scores than Tobacyk and Milford's (1983) original assessment, where the subscale alpha coefficients ranged from .60 to .87.

Eysenck's Personality Questionnaire. To measure psychoticism, extraversion, and neuroticism, S. B. Eysenck et al.'s (1985) short-form/revised version of the Personality Questionnaire was used. This version features updated Extraversion (10 items) and Neuroticism (10 item) scales and a 12-item Psychoticism scale. Each scale was rated via 5-point Likert scales ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The internal consistency scores ranged from questionable to excellent for each scale (Psychoticism [α = .64], Extraversion [α = .91], and Neuroticism [α = .88]). The mean scores for each scale were moderate (Psychoticism [M = 2.17, SD = .45], Extraversion [M = 3.64, SD = .64], and Neuroticism [M = 2.56, SD = .73]). The current reliability assessment produced higher internal consistency scores than Wrench and McCroskey's (2001) previous assessment (Psychoticism [α = .60], Extraversion [α = .76], and Neuroticism [α = .79]).

Lie Acceptability Scale. As a measure of lying, Oliveira and Levine's (2008) Lie Acceptability Scale was employed. The scale is a unidimensional measure based on the previous deception works of McCornack and Levine (1990) and Levine, McCornack, and Avery (1992). The eight-item scale contains four positive and four negatively worded items. The items were rated on a 5-point Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

The four negatively worded items were reverse coded before analysis. The internal consistency score was acceptable (α = .78). The mean participant scores were moderate (M = 2.39, SD = .73). The internal consistency score was similar to Oliveira and Levine's (2008) original scale assessment, which produced an alpha coefficient of .83.

RESULTS

RQ1a asked if participant psychoticism scores (independent variable; IV) predict participant paranormal belief scores (dependent variable; DV). Regression analysis revealed that participant psychoticism scores do not significantly predict (combined subscales) participant paranormal belief scores, $F(1, 246) = .227$, $p = .59$, $R^2 = .034$, adjusted $R^2 = .001$. (All standardized regression coefficients, standard error reporting, unstandardized regression coefficients, t scores, and significance levels for the study are reported in Table 1. See Table 2 for all measures of central tendency and variance.)

RQ1b inquired about the extent to which participant scoring variance on the Traditional Religious Belief subscale of the Paranormal Belief Scale affected the relationship between psychoticism and paranormal belief. Regression analysis was conducted with the Traditional Religious Belief subscale dropped from the analysis. The findings revealed that participant psychoticism scores do not significantly predict participant paranormal belief scores (without the Traditional Religious Belief subscale), $F(1, 246) = 3.31$, $p = .70$, $R^2 = .013$, adjusted $R^2 = .009$. However, when participant psychoticism scores were tested as a predictor of the traditional religious belief dimension of paranormal belief, participant psychoticism scores were found to significantly predict the Traditional Religious Beliefs subscale, $F(1, 249) = 33.51$, $p < .001$, $R^2 = .119$, adjusted $R^2 = .115$, accounting for almost 12% of scoring variance. A VIF score of 1.03 was observed for Psychoticism, which indicates low multicollinearity.

Table 1. *Regression Analysis Table*

	B	*SE*	β	*t*	*p*
Psychoticism (IV)					
CDPB (DV)	.052	.098	.034	0.526	.599
CDPBDTR (DV)	.170	.093	.115	1.83	.070
TRPB (DV)	−.755	.130	−.344	−5.78	.001**
LA (DV)	.510	.038	.319	5.27	.001**
Extraversion (IV)					
CDPB (DV)	.116	.069	.107	1.69	.092
CDPBDTR (DV)	.091	.065	.089	1.39	.164
Neuroticism (IV)					
CDPB (DV)	.127	.059	.135	2.14	.033*
CDPBDTR (DV)	.124	.057	.138	2.19	.030*
LA (DV)	.133	.065	.133	2.09	.037*
Lie Acceptability (IV)					
CDPB (DV)	.121	.066	.125	1.96	.05*
CDPBDTR (DV)	.183	.068	.199	3.16	.002**

Note. CDPB = combined dimension paranormal belief, CDPBDTR = combined dimension paranormal belief with dropped Traditional Religious Beliefs subscale; TRPB = traditional religious paranormal belief; LA = lie acceptability.

*$p < .05$. **$p < .01$.

Table 2. *Mean Scores and Standard Deviation for Paranormal Belief, Personality Temperaments, and Lie Acceptability*

Variable type	*M*	*SD*
Overall PB	2.54	.69
Overall PB (minus TRPB)	1.89	.67
Traditional Religious PB	4.15	.99
Psychoticism	2.17	.45
Extraversion	3.64	.64
Neuroticism	2.56	.73
Lie acceptability	2.39	.73

Note. PB = Paranormal Belief Scale; TRPB = Traditional Religious Paranormal Belief.

RQ2a and RQ2b asked if participant extraversion scores predict participant paranormal belief and to what extent the scoring variance of the traditional religious belief subscale of the Paranormal Belief Scale affects the relationship between the variables. The results of regression analysis examining participant extraversion and participant paranormal belief indicate that participant extraversion scores do not significantly predict participant paranormal belief scores, $F(1, 246) = 2.86$, $p = .092$, $R^2 = .012$, adjusted $R^2 = .008$. Likewise, regression analysis with the Traditional Religious Belief subscale did not support extraversion as a significant predictor, $F(1, 246) = 1.95$, $p = .164$, $R^2 = .008$, adjusted $R^2 = .004$. A VIF score of 1.12 was observed for extraversion, which indicates low multicollinearity.

Hypothesis 1 predicted that participant neuroticism scores (IV) would positively predict participant (combined subscales) paranormal belief scores (DV). The results of regression analysis support this hypothesis, indicating that participant neuroticism scores are a positive predictor of participant paranormal belief

scores, $F(1, 246) = 4.58$, $p = .03$, $R^2 = .018$, adjusted $R^2 = .014$. The model accounted for roughly 2% of scoring variance.

As follow-up analysis, RQ3 inquired about the extent to which participant scoring variance on the traditional religious belief subscale of the Paranormal Belief Scale affects the relationship between participant neuroticism and paranormal belief scores. Regression analysis was conducted with the traditional religious belief subscale dropped. The findings were statistically similar, $F(1, 246) = 4.78$, $p = .03$, $R^2 = .019$, adjusted $R^2 = .015$. Again, only about 2% of score variance was accounted for by the model. A VIF score of 1.09 was observed for neuroticism, which indicates low multicollinearity.

Recall that Hypothesis 2 predicted that participant neuroticism scores (IV) would directly predict participant lie acceptability scores (DV). The results of regression analysis support neuroticism as a direct predictor of lie acceptability, $F(1, 246) = 4.38$, $p = .037$, $R^2 = .018$, adjusted $R^2 = .014$. The model accounted for approximately 2% of the scoring variance.

Similarly, Hypothesis 3 predicted that participant psychoticism scores would directly predict participant lie acceptability scores. Regression analysis supported this hypothesis, $F(1, 246) = 27.81$, $p < .001$, $R^2 = .102$, adjusted $R^2 = .098$. Psychoticism scores accounted for roughly 10% of the scoring variance.

Last, RQ4a and RQ4b asked if participant lie acceptability scores (IV) predict participant paranormal belief scores (DV) and to what extent the variance of participant traditional religious belief scores affects the association between paranormal belief and lie acceptability. The results of regression analysis indicate that participant lie acceptability scores predict participant paranormal belief scores, $F(1, 244) = 3.86$, $p = .05$, $R^2 = .016$, adjusted $R^2 = .012$, and account for 1.6% of scoring variance. The data were reanalyzed with the traditional religious belief subscale of the Paranormal Belief Scale dropped from the analysis. Regression analysis revealed that participant lie acceptability scores significantly predict

participant paranormal belief scores with the traditional religious belief subscale removed from the analysis, $F(1, 244) = 10.01$, $p < .01$, $R^2 = .04$, adjusted $R^2 = .036$. The model accounted for close to 5% of the scoring variance. Dropping the traditional religious belief subscale scores made the predictive power of the model more meaningful.

DISCUSSION

The primary goal of this study was to examine the interrelatedness of paranormal belief, personality temperaments, and lie acceptability. The current research offers partial support for the communibiological paradigm by observing two biologically determined personality temperaments (psychoticism and neuroticism) as significant predictors of paranormal belief and lie acceptability. One of H. J. Eysenck's (1956, 1978, 1986) Big Three, neuroticism, was observed as a significant predictor of paranormal belief; the other temperaments, psychoticism and extraversion, were not. Though participant neuroticism accounted for a low to moderate amount of scoring variance in participant paranormal belief, neuroticism was observed as a statistically significant predictor. Likewise, the proportion of variance accounted for by neuroticism was not dissimilar to previous research supporting the communibiological paradigm (see Paulsel & Mottet, 2004; Porter, Wrench, & Hoskinson, 2007). Comparable to the current findings, previous works have observed the Big Three temperaments as statistically significant predictor variables that have accounted for similar amounts of variance in a variety of dependent measures.

Moreover, the current findings support previous research that has indicated that neuroticism is the only meaningful temperament predictor of paranormal belief (see Robbins et al., 2010; Williams et al., 2007). Conversely, *two* of Eysenck's temperaments, psychoticism and neuroticism, were observed as significant predictors of lie acceptability.

With regard to individual research questions and hypotheses, RQ1a and RQ1b asked if participant psychoticism scores would predict participant paranormal belief scores. The results did not support participant psychoticism scores as a predictor of participant paranormal belief scores, including paranormal belief with the traditional religious belief subscale dropped. The current findings are similar to Williams et al.'s (2007) results, where no statistically significant relationship was observed between paranormal belief and psychoticism. Nevertheless, previous research has been unclear regarding the relationship between psychoticism and paranormal belief (Lester, 1993; Robbins et al., 2010). Although some research has indicated that people exhibiting high levels of psychoticism may be attracted to specific categories of paranormal belief (Lester, 1993; Robbins et al., 2010), paranormal belief (summed subscales) as operationalized by Tobacyk and Milford (1983) is not meaningfully predicted by psychoticism in the current findings or previous literature.

Conversely, participant traditional religious belief subscale scores were negatively predicted by participant psychoticism scores. This finding supports the results of Robbins et al. (2010), who observed a negative relationship between psychoticism and traditional religious belief. The current findings may partially explain the lack of respect and adherence to traditional religious beliefs reported to be common with people exhibiting high levels of psychoticism (H. J. Eysenck & Eysenck, 1976). The findings also offer empirical support for scholars who have argued for construct distinction between traditional religious views and other forms of paranormal belief (see Ganiel & Mitchell, 2006; A. F. Smith & Simmonds, 2006).

Regarding RQ2a and RQ2b, extraversion was not observed as a significant predictor of paranormal belief (traditional religious belief subscale included and dropped). The current results are similar to previous research (see Svensen et al., 1992; Williams et al., 2007). The absence of a statistically significant relationship may speak to extraverts' ambivalent view of paranormal belief. Although belief in

the paranormal has become more accepted in society via popular reality television shows, websites, and ghost hunting events, such beliefs may continue to retain a social stigma. Such a stigma could dampen extraverts' acceptance of paranormal belief.

Regarding Hypothesis 1, the findings confirm the results of previous research (see Dagnall et al., 2007; Quesnell, 2000; Williams et al., 2007; Wiseman & Watt, 2004) supporting neuroticism as a predictor of paranormal belief. Regarding RQ3, the findings indicated no statistical difference in the regression model when participant's traditional religious belief scores were dropped. While the results offer support for participant neuroticism scores being a significant predictor of paranormal belief, the theoretical explanation remains imprecise. Do people exhibiting high levels of neuroticism merely appeal to the paranormal to withstand negative emotion, as previous research has suggested (McCrae & Costa, 1987; Williams et al., 2007), or is paranormal belief merely a consequence of being highly neurotic (Williams et al., 2007)? Answering such questions is beyond the scope of this article and would likely be best explored through qualitative means. Nevertheless, the current findings are consistent with previous scholarship.

Regarding Hypothesis 2, participant neuroticism was observed as a positive predictor of participant lie acceptability. The results were expected, and they confirmed Abel's (2008) findings. Additionally, the results support an individual's tendency to employ lying as a communicative strategy to cope with negative emotion. For example, a person who exhibits high levels of neuroticism could construct lies to avoid affinity-reducing conflicts (Richmond & McCroskey, 2009). Via lies, an individual could simply circumvent such conflicts and evade increased anxiety and negative emotion. Consequently, lying could be viewed as a beneficial communicative tool by people who report high levels of neuroticism.

Regarding Hypothesis 3, participant psychoticism scores positively predicted participant lie acceptability scores. The results

offered support for previous research (Abel, 2008). As noted earlier, individuals reporting high levels of psychoticism have little regard for the feelings of others and for social norms (S. B. Eysenck et al., 1985). The current findings speak to the beliefs of individuals exhibiting high levels of psychoticism. Psychotics may use lies to manipulate communicative encounters and deceptively control others (van Dongen, 2002). Likewise, psychotics are prone to engage in risky or dangerous behavior (H. J. Eysenck & Eysenck, 1976). Lying could be a communicative resource for such individuals to conceal dangerous behaviors that could incur societal punishment.

The findings for RQ4a and RQ4b indicated that participant lie acceptability scores do predict participant paranormal belief scores (combined subscales). Second, when the traditional religious belief subscale of the Paranormal Belief Scale was dropped from the analysis, the amount of paranormal belief scoring variance predicted by participant lie acceptability scores increased from 1.6% to nearly 5%, which is a substantial increase in the predictive power.

Furthermore, the current findings regarding paranormal belief and lie acceptability offer insight into the larger societal debate pertaining to the paranormal by understanding how these variables relate. Although observing an empirical association between paranormal belief and lie acceptability does not mean that rhetors of paranormal belief are merely lying, the observation does explicate lie acceptability as a possible communicative trait held by individuals reporting high levels of paranormal belief. In other words, lie acceptability is "a communicative means to achieving personal and social goals" (Oliveira & Levine, 2008, p. 282) for participants reporting high levels of paranormal belief. The observed relationship can be partially explained by the connection between paranormal belief and lowered reasoning abilities (Hergovich & Arendasy, 2005). Individuals with high levels of paranormal belief could see lying as an appropriate means of discourse and not understand the faulty and illogical nature of paranormal belief. An alternative

explanation might be found by examining the association among paranormal belief, fantasy proneness (Kennedy, 2005), and narrative suggestibility (Ramsey et al., 2011). An individual who desires to establish the validity of his or her fantasy-based paranormal beliefs with others may view lying, via narrative embellishment, as a means to bolster his or her argument for paranormal belief in interpersonal and public contexts. For example, a person who truly believes in psychic phenomena could lie about his or her about psychic experiences to support his or her perspective in discourse.

Limitations and Future Research

A number of limitations exist with the present research. With respect to the participants, they were recruited via a convenience sample at a large southern university in the United States. The use of college students presents limits in terms of generalizability—the findings only speak to younger adults who are university students.

Likewise, respondent fatigue may have been a factor because each participant was asked to complete 64 Likert-type items. While completing the survey packets took the participants no longer than 15 minutes, the monotonous scoring options of the survey packets could have resulted in fatigue-based agreement bias (DeVellis, 2003).

Beyond the participant limitations, the study is correlational in nature. Although meaningful analyses can be attained via correlational research, true causality cannot be assumed from the findings. For example, Hypothesis 1 predicted that neuroticism would predict paranormal belief. While this hypothesis was supported, participant neuroticism cannot be identified as causally linked to paranormal belief. The same can be presumed for neuroticism and psychoticism predicting lie acceptability and for lie acceptability predicting paranormal belief. Future research should employ experimental designs to control for causality. This would produce more meaningful analyses beyond correlational research.

Future research may also benefit from rich qualitative descriptions and analyses of communication variables affecting paranormal belief. For example, conducting interviews and asking open-ended questions about individuals' paranormal belief could explicate factors that contribute to paranormal belief.

Conclusion

In conclusion, this study highlights the communicative intersections of hereditability (temperaments), belief (paranormal belief), and trait communication (lie acceptability). Three hypotheses and four research questions served as the basis for the study. Taken as a whole, the findings offer partial support for the communibiological paradigm though investigating biological temperaments as factors for why people believe in the paranormal and view lying as a viable communicative option.

Moreover, paranormal belief is a fascinating, rich, and relevant social scientific construct that is inherently tied to communication and social discourse. Understanding how individual personality differences predict belief and communicative choices will help communication scholars continue to investigate our "society's enthusiasm for the paranormal" (Ramsey et al., 2011, p. 91).

AUTHORS' NOTE: M.C.R. would like to thank his research assistants, Basra Mohamed and J. P. Zimmermann.

REFERENCES

Aarnio, K., & Lindeman, M. (2007). Religious people and paranormal believers: Alike or different? *Journal of Individual Differences, 28*(1), 1–9.

Abel, T. (2008). *Cultural components of deception* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. AAT 3368120)

American Ghost Society. (2012). *Troy Taylor's American hauntings.* Retrieved from http://www.prairieghosts.com/

Aristotle. (2006). *Art of rhetoric.* London: Loeb Classical Library.

Atlantic Paranormal Society. (2012). *TAPS.* Retrieved from http://the-atlantic-paranormal-society.com/

Back, C. (2009). *Ghosts of the McBride house: A true haunting.* Woodbury, MN: Llewellyn.

Beatty, M. J., Heisel, A. D., Hall, A. E., Levine, T. R., & La France, B. H. (2002). What can we learn from the study of twins about genetic and environmental influences on interpersonal affiliation, aggressiveness, and social anxiety? A meta-analytic study. *Communication Monographs, 69*, 1–18.

Beatty, M. J., & McCroskey, J. C. (2009). A communibiological perspective on communication apprehension. In J. A. Daly, J. C. McCroskey, J. Ayres, T. Hopf, D. M. Ayres-Sonandre, & T. K. Wongprasert (Eds.), *Avoiding communication: Shyness, reticence, and communication apprehension* (3rd ed., pp. 53–66). Cresskill, NJ: Hampton Press.

Beatty, M. J., McCroskey, J. C., & Heisel, A. D. (1998). Communication apprehension as temperamental expression: A communibiological paradigm. *Communication Monographs, 65*, 197–219.

Beatty, M. J., & Valencic, K. M. (2000). Context-based apprehension versus planning demands: A communibiological analysis of anticipatory public speaking anxiety. *Communication Education, 49*, 58–71.

Behnke, R. R., Carlile, L. W., & Lamb, D. H. (1974). A psychophysiological study of state and trait anxiety in public speaking. *Central States Speech Journal, 25*, 249–253.

Blum, J., Peli, O., Schneider, S. (Producers), Joost, H., & Schulman, A. (Directors). (2011). *Paranormal activity 3* [Motion picture]. United States: Paramount Pictures.

Blum, J., Peli, O. (Producers), & Williams, T. (Director). (2010). *Paranormal activity 2* [Motion picture]. United States: Paramount Pictures.

Bozak, C. (Producer). (2007). *Psychic kids: Children of the paranormal* [Television series]. New York: Arts and Entertainment Network.

Brooks, P., Farrands, D. (Producers), & Cornwell, P. (Director). (2009). *A haunting in Connecticut* [Motion picture]. United States: Lionsgate.

Browne, S. (2007). *Psychic children.* London: Piatkus Books.

Browne, S. (2010). *Psychic: My life in two worlds.* New York: HarperOne.

Buell, R. (Producer), & Calek, C. (Director). (2010). *American ghost hunter* [Motion picture]. United States: True Player.

Clark, L. (2002). U.S. adolescent religious identity, the media, and the "funky" side of religion. *Journal of Communication, 52*(4), 794–811.

Dagnall, N., Parker, A., & Munley, G. (2007). Superstitious belief—negative and positive superstitions and psychological functioning. *European Journal of Parapsychology, 22*(2), 121–137.

DePaulo, B. M., Kashy D. A., Kirkendol, S. E., Wyer, M. M., & Epstein, J. A. (1996). Lying in everyday life. *Journal of Personality and Social Psychology, 70*, 979–995.

DeVellis, R. F. (2003). *Scale development: Theory and applications* (2nd ed.). Thousand Oaks, CA: Sage.

Eysenck, H. J. (1956). The questionnaire measurement of neuroticism and extraversion. *Revista di Psiocologia, 50*, 113–140.

Eysenck, H. J. (1978). Superfactors P, E, and N in a comprehensive factor space. *Multivariate Behavioral Research, 13*, 475–481.

Eysenck, H. J. (1986). Can personality study ever be scientific? *Journal of Social Behavior and Personality, 1*, 3–20.

Eysenck, H. J. (1998). *Dimensions of personality* (Rev. ed.). New Brunswick, NJ: Transaction.

Eysenck, H. J., & Eysenck, M. W. (1985). *Personality and individual differences: A natural science approach.* New York: Plenum Press.

Eysenck, H. J., & Eysenck, S. B. G. (1976). *Psychoticism as a dimension of personality.* London: Hodder and Stoughton.

Eysenck, S. B., Eysenck, H. J., & Barrett, J. (1985). A revised version of the psychoticism scale. *Personality and Individual Differences, 6*, 21–29.

Feldman, R. S., Forrest, J. A., & Happ, B. R. (2002). Self-presentation and verbal deception: Do self-presenters lie more? *Basic and Applied Psychology, 24*, 163–170.

Ford, C. V., King, B. H., & Hollender, M. H. (1988). Lies and liars: Psychiatric aspects of prevarication. *American Journal of Psychiatry, 145*, 554–562.

Francis, L. J., & Williams, E. (2009). Alternative spiritualties: Different personalities? An enquiry concerning paranormal beliefs and traditional religiosity. *Research in the Social Scientific Study of Religion, 20*, 69–84.

Ganiel, G., & Mitchell, C. (2006). Turning the categories inside-out: Complex identifications and multiple interactions in religious ethnography. *Sociology of Religion, 67*, 3–21.

George, J. F., & Robb, A. (2008). Deception and computer-mediated communication in daily life. *Communication Reports, 21*, 92–103.

Gray, J. A. (1991). The neuropsychology of temperament. In J. Strelau & A. Angleitner (Eds.), *Explorations in temperament* (pp. 105–128). New York: Plenum.

Green, S. (Producer). (2011). *Paranormal challenge* [Television series]. Chevy Chase, MD: Scripps Networks.

Grimmer, M. R. (1992). Searching for security in the mystical. *Skeptical Inquirer, 16*, 173–176.

Groff, N. (Producer). (2008). *Ghost adventures* [Television series]. Chevy Chase, MD: Scripps Networks.

Hawes, J., Wilson, G., & Friedman, M. J. (2009). *Seeking spirits: The lost cases of the Atlantic Paranormal Society.* New York: Pocket Books.

Hergovich, A. (2003). Field experience, suggestibility, and belief in paranormal phenomena. *Personality and Individual Differences, 34*, 195–209.

Hergovich, A., & Arendasy, M. (2005). Critical thinking ability and belief in the paranormal. *Personality and Individual Differences, 38*, 1805–1812.

Hergovich, A., Schott, R., & Arendasy, M. (2005). Paranormal belief and religiosity. *Journal of Parapsychology, 69*, 293–303.

Hergovich, A., Schott, R., & Arendasy, M. (2008). On the relationship between paranormal belief and schizotypy among adolescents. *Personality and Individual Differences, 45*(2), 119–125.

Irwin, H. J. (1994). Paranormal belief and proneness to dissociation. *Psychological Reports, 75*, 1344–1346.

Katz, R. (Producer). (2004). *Ghost hunters* [Television series]. New York: National Broadcasting Company.

Kelly, L., & Keaten, J. A. (2000). Treating communication anxiety: Implications of the communibiological paradigm. *Communication Education, 49*, 45–57.

Kennedy, J. E. (2005). Personality and motivations to believe, misbelieve, disbelieve in paranormal phenomena. *Journal of Parapsychology, 69*, 263–292.

King, L. A., Burton, C. M., Hicks, J. A., & Drigotas, S. M. (2007). Ghosts, UFOs, and magic: Positive affect and the experimental system. *Journal of Personality and Social Psychology, 92*, 905–919.

Lester, D. (1993). Paranormal beliefs and psychoticism. *Personality and Individual Differences, 14*(5), 739.

Levine, T. R., McCornack, S. A., & Avery, P. (1992). Sex differences in emotional reactions to discovered deception. *Communication Quarterly, 40*, 289–296.

Lewis, M., & Saarni, C. (1993). *Lying and deception in everyday life.* New York: Guilford Press.

Masek, D. (Producer). (2010). *My ghost story* [Television series]. New York: Arts and Entertainment Network.

McCornack, S. A., & Levine, T. R. (1990). When lies are uncovered: Emotional and relational outcomes of discovered deception. *Communication Monographs, 57*(2), 119–138.

McCrae, R. R., & Costa, P. T. (1987). Validation of the five-factor model of

personality across instruments and observers. *Journal of Personality and Social Psychology, 52*, 81–90.

McCroskey, J. C. (1997). *Why we communicate the way we do: A communibiological perspective.* Boston: Allyn and Bacon.

McLeod, B. A., & Genereux, R. L. (2008). Predicting the acceptability and likelihood of lying: The interaction of personality with type of lie. *Personality and Individual Differences, 45*, 591–596.

Metts, S., & Chronis, H. (1986). *An exploratory investigation of relational deception.* Paper presented at the annual meeting of the International Communication Association, Chicago.

Moses, K. (Producer). (2005). *Ghost whisperer* [Television series]. New York: Columbia Broadcasting System.

Oliveira, C. M., & Levine, T. M. (2008). Lie acceptability: A construct and measure. *Communication Research Reports, 25*(4), 282–288.

Paranormal Research Society. (2012). *The Paranormal Research Society.* Retrieved from http://paranormalresearchsociety.org/

Paulsel, M. L., & Mottet, T. P. (2004). Interpersonal communication motives: A communibiological perspective. *Communication Quarterly, 52*(2), 182–195.

Peli, O. (Producer & Director). (2007). *Paranormal activity* [Motion picture]. United States: Blumehouse Productions.

Porter, H., Wrench, J. S., & Hoskinson, C. (2007). The influence of supervisor temperament on subordinate job satisfaction and perceptions of supervisor sociocommunicative orientation and approachability. *Communication Quarterly, 55*(1), 129–153.

Quesnell, M. D. (2000). *An analysis of selected beliefs and values among Czech 14 and 15 year-old public school students* (Unpublished doctoral dissertation). University of Wales Trinity College, Carmarthen.

Rabeyron, T., & Watt, C. (2010). Paranormal experiences, mental health and mental boundaries, and psi. *Personality and Individual Differences, 48*(4), 487–492.

Ramsey, M. C., Venette, S., & Rabalais, N. (2011). The perceived paranormal and source credibility: The effects of narrative suggestions on paranormal belief. *Atlantic Journal of Communication, 19*(2), 79–96.

Richmond, V. P., & McCroskey, J. C. (2009). *Organizational communication for survival: Making work, work* (4th ed.). Boston: Pearson.

Robbins, M., Francis, L. J., & Williams, E. (2010). Conventional Christian belief and unconventional paranormal belief among teenagers in Northern Ireland: A personality and individual differences approach. *Irish Journal of Psychology, 31*, 87–94.

Ruch, W. (1994). Temperament, Eysenck's PEN system, and humor-related traits. *Humor: International Journal of Humor Research, 7*, 209–244.

Sasson, R. (Producer). (2007). *Paranormal state* [Television series]. New York: Arts and Entertainment Network.

Sharps, M. J., Matthews, J., & Asten, J. (2006). Cognition and belief in paranormal phenomena: Gestalt/feature-intensive processing theories and tendencies toward ADHD, depression, and dissociation. *Journal of Psychology, 140*, 579–590.

Simonian, I. (2011). *Paranormal belief, personality traits, and subjective well-being* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3421108)

Smith, A. F., & Simmonds, J. G. (2006). Help-seeking and paranormal beliefs in adherents of mainstream religion, alternative religion, and no religion. *Counseling Psychology Quarterly, 19*, 331–341.

Smith, C. L., Johnson, J. L., & Hathaway, W. (2009). Personality contributions to belief in paranormal phenomena. *Individual Differences Research, 7*(2), 85–96.

Sparks, G. G., Hansen, T., & Shah, R. (1994). Do televised depictions of paranormal events influence viewers' paranormal beliefs? *Skeptical Inquirer, 18*, 386–395.

Sparks, G. G., & Miller, W. (2001). Investigating the relationship between exposure to television programs that depict paranormal phenomena and beliefs in the paranormal. *Communication Monographs, 68*(1), 98–113.

Sparks, G. G., Nelson, C. L., & Campbell, R. G. (1997). The relationship between exposure to television messages about paranormal phenomena and paranormal beliefs. *Journal of Broadcasting and Electronic Media, 41*, 345–359.

Svensen, S. G., White, K. D., & Caird, D. D. (1992). Replications and resolutions: Dualistic belief, personality, religiosity, and paranormal belief in Australian students. *Journal of Psychology: Interdisciplinary and Applied, 126*, 445–447.

Tobacyk, J. J., & Milford, G. (1983). Belief in paranormal phenomena: Assessment instrument development and implications for personality functioning. *Journal of Personality and Social Psychology, 44*, 1029–1037.

Turner, R. E., Edgley, C., & Olmstead, G. (1975). Information control in conversations: Honesty is not always the best policy. *Kansas Journal of Sociology, 11*, 69–89.

Tyler, J. M., & Feldman, R. S. (2004). Cognitive demand and self-presentation efforts: The influence of situational importance and interaction goal. *Self and Identity, 3*, 364–377.

van Dongen, E. (2002). Theatres of the lie: "Crazy" deception and lying as drama. *Anthropology and Medicine, 9*, 135–151.

Walsh, J. (Producer). (2009). *Paranormal cops* [Television series]. New York: Arts and Entertainment Network.

Watzlawick, P., Beavin, J., & Jackson, D. (1967). *The pragmatics of human communication: A study of interactional patterns, pathologies, and paradoxes.* New York: W. W. Norton.

Williams, E., Francis, L. J., & Robbins, M. (2007). Personality and paranormal belief: A study among adolescents. *Pastoral Psychology, 56*, 9–14.

Wiseman, R., & Watt, C. (2004). Measuring superstitious belief: Why lucky charms matter. *Personality and Individual Differences, 37*(8), 1533–1541.

Wiseman, R., & Watt, C. (2006). Belief in psychic ability and the misattribution hypothesis: A qualitative review. *British Journal of Psychology, 97*, 323–338.

Wrench, J. S., Brogan, S. M., McCroskey, J. C., & Jowi, D. (2008). Social communication apprehension: The intersection of communication apprehension and social phobia. *Human Communication, 11*(4), 409–430.

Wrench, J. S., & McCroskey, J. C. (2001). A temperamental understanding of humor communication and exhilaratabilty. *Communication Quarterly, 49*, 142–159.

Foreign-Born Faculty Who Speak Accented English: A Qualitative Investigation of Experiences In and Out of the Classroom

ANNETTE L. FOLWELL

University of Idaho

Twenty foreign-born tenured or tenure-track faculty who speak accented English were interviewed regarding the outcomes of teaching with an accent and communication strategies employed to promote understanding with their students and colleagues. Though the majority of faculty received negative student comments about their accents, faculty reported both positive (e.g., increased student exposure to diversity) and negative outcomes (e.g., student feelings of anger). Foreign-born faculty used particular communication strategies to encourage student understanding in the classroom; specifically, faculty commented on communication tactics to "overcome" their accent as well as interaction strategies to facilitate effective communication with students. Most interviewees recalled problems communicating with their colleagues but stated that they were able to overcome these misunderstandings. Last, the majority of faculty either engaged in formal or informal actions to reduce their accents or believe that there should be formal structures within a university to help faculty who want to reduce their accents.

KEYWORDS: Foreign-born faculty, accent, communication strategies, classroom interaction, understanding

Cultural diversity in higher education is increasing across the country. During the 2008–2009 academic year, 113,494 foreign-born scholars were teaching or conducting research on U.S. campuses; this number represents an increase of 7% from the previous year

Annette L. Folwell, Ph.D., is an associate professor at the Department of Psychology and Communication Studies, University of Idaho. She can be reached at Department of Psychology and Communication Studies, University of Idaho, 875 Perimeter Drive, MS 3043, Moscow, ID 84844-3043 or at folwell@uidaho.edu.

(Institute of International Education, 2009). Many universities are actively recruiting faculty from abroad to help make U.S. colleges and universities global centers of excellence and diversity (Wulf, 2005). As the number of foreign-born faculty increases, more and more foreign-born faculty will be entering the classroom. One of the more powerful perceptions about foreign-born faculty is that linguistic differences create teaching ineffectiveness (Marvasti, 2005), and yet speaking with an accent is part of one's identity and expresses social information such as in-group and out-group membership (Giles & Johnson, 1987; Gluszek & Dovidio, 2010). Faculty who speak accented English cannot simply shed their accents or identities when they walk into a classroom or other academic setting to be perceived as effective instructors.

Prior research has considered the role of accent on classroom interaction, with a focus on students' perceptions of nonnative speakers in the classroom (see Bresnahan, Okashi, Negashi, Liu, & Shearman, 2002; Gill, 1994; Thweatt, 2003). Although several studies have addressed the perspective of the teacher (see Alberts, 2008; Chen, 2005; Collins, 2008; McLean, 2007; Vargas, 1999), most focus on foreign-born graduate teaching assistants rather than on faculty members. The purpose of the current study is to address the "void in research on the foreign-born, non-native speaker college instructors" (Wang, 1999–2000, p. 32) by examining the experiences of faculty members who speak with accented English. Specifically, this study examines the communication strategies that foreign-born faculty members use in the classroom environment and in the departmental setting to be competent and effective professors.

LITERATURE REVIEW

As U.S. higher education institutions strive to recruit and retain the best and the brightest faculty members, more foreign-born faculty

members are joining American universities and colleges. Previous research regarding foreign-born faculty members has concentrated on adjustment issues, revealing that foreign-born faculty experience feelings of marginalization and isolation (see Collins, 2008; Skachkova, 2007; Thomas & Johnson, 2004). Additional research on foreign-born faculty has examined productivity and found that foreign-born faculty are more productive in research but less effective in teaching and service than U.S. faculty (Mamiseishvili & Rosser, 2010). Last, foreign-born faculty from Asia and the Middle East are less satisfied with their jobs than are native-born faculty (Wells, Seifert, Park, Reed, & Umbach, 2007).

Though a modest amount of previous research has examined the role of foreign-born faculty members in higher education institutions, very little communication research has addressed the issues surrounding the professional role of foreign-born faculty. Attending to such issues is important given how teacher diversity can affect classroom dynamics (Vargas, 1999). Some studies have addressed the issue of speaking with an accent by adopting one of three different perspectives: the perspective of the student with a professor who speaks with an accent, the perspective of the graduate teaching assistant who speaks with an accent, and the perspective of the faculty member who speaks with an accent. The bulk of the research concerns student perspectives. For example, Rubin and Smith (1990) argued that listeners' perceptions of instructor accents was the strongest predictor of teaching effectiveness ratings; when students thought the instructor's accent was foreign, they perceived him or her to be a poor teacher. In addition, 40% of Rubin and Smith's undergraduate sample preferred to avoid classes taught by foreign teaching assistants. More recently, Bresnahan et al. (2002) found that undergraduate students prefer American English but that an intelligible foreign accent results in more positive attitudes and affective responses compared to a foreign accent that is unintelligible. Furthermore, Thweatt (2003) found that student openness

to diversity and challenge was a predictor of student attitudes and communication competence.

As for graduate teaching assistants' perspectives with regard to their own accented English, Chen (2005) cited three categories of problems experienced by foreign teaching instructors: cultural differences, linguistic level of understanding, and relationship development. As Chen pointed out, one of the "major cultural problems between foreign instructors and American students is the perception of the learning process; it enhances the students' biases by attributing their incompetence to instructor's foreign background" (p. 18). However, conversely, the foreign-born graduate teaching assistants acknowledged the potential positive influence of cultural diversity, which may enhance the learning process and expand student perspectives (Chen, 2005).

A small number of studies have addressed faculty members' perspectives of teaching with an accent. In particular, McLean (2007) interviewed seven Asian-born female faculty members to determine how they establish teacher credibility. She found that foreign-born women faculty members have low self-confidence regarding their own English competency because of their perceptions of language barriers. Thus these women used three strategies to establish credibility, including self-disclosure, rapport setting, and elimination of uncertainty of grading. In another study that considered the specific perspective of the foreign-born female professor, Skachkova (2007) collected narratives from 34 immigrant women professors who taught at a major research university. Although the narratives of immigrant women professors told of immigration success stories, few narratives told academic success stories in terms of promotion and tenure and other measures of professional success. Accent was the most problematic aspect of teaching for these women. Foreign-born women professors are treated as strangers and experience barriers in their professional lives because of their gender, ethnicity, and countries of origin (Skachkova, 2007).

Two empirical studies considered both the students' and the faculty members' views of teaching with an accent. Collins (2008) conducted a survey with foreign-born faculty and students and concluded that foreign-born faculty have considerable concerns about cultural differences, including relating with students. Additionally, Alberts (2008) examined the challenges faced by foreign-born faculty and by students taught by foreign-born faculty. Student attitudes toward foreign-born faculty varied from disliking foreign-born faculty teaching courses to believing these faculty provide more than the common classroom education through exposure to different points of view and insight into people and events. Most students felt that foreign-born faculty provide advantages and disadvantages and believed that the disadvantages can be overcome by making an effort from both students and professors.

Little scholarly attention has focused on the experiences of foreign-born faculty outside the classroom; as Kim, Wolf-Wendel, and Twombly (2011) pointed out, "little is known about who they are, where they work, and how they experience U.S. higher education institutions" (p. 721). Foreign-born scholars employed by public universities are more productive but experience lower levels of satisfaction than native-born scholars (Kim et al., 2011; Sabharwal, 2011). Other research, which did not specifically target the departmental setting, has indicated that accent may be used to assess a person's skills and may lead to prejudice and discrimination (Marvasti, 2005). Foreign-born professors who feel stereotyped have reported a lack of collegiality with native-born professors, fewer positive feelings toward the university, and higher levels of loneliness (Bazemore, Janda, Derlega, & Paulson, 2010).

PURPOSE AND RESEARCH QUESTIONS

Most research regarding the position of a faculty member has focused on homogenous samples of native-born, native-speaking,

White college faculty. When a foreign-born faculty member who speaks accented English is teaching the class, the dynamics of the classroom may change. In fact, Vargas (1999) argued that teacher diversity shapes classroom social life. Additionally, Baker and Copp (1997) stated that when professors differ from the White male heterosexual norm, they must contend with how students perceive their differences and hope their differences will not be perceived as liabilities.

Students may try to avoid taking classes from foreign-born faculty who speak with an accent (Rubin & Smith, 1990), and student openness to foreign-born faculty predicts student attitudes toward the communication competence of foreign-born faculty (Thweatt, 2003). While students actively avoid foreign-born faculty, foreign-born teaching assistants experience problems with cultural differences and relational development with their students (Chen, 2005). Furthermore, foreign-born faculty experience marginalization and isolation (Collins, 2008; Skachkova, 2007), low self-confidence with regard to their English competency (McLean, 2007), and trepidation about cultural differences between their students and themselves (Collins, 2008). Consistently, foreign-born faculty have higher productivity but lower job satisfaction than their native-born counterparts (Corley & Sabharwal, 2007; Kim et al., 2011).

The purpose of this study is to examine the professional experiences of foreign-born faculty who speak with an accent. To do so, this study must consider not only the experiences of these faculty within the classroom setting with students but also their experiences outside the classroom, in the larger departmental setting, with other faculty who may be native speakers. With the increasing number of foreign-born faculty on campus and the fact that accent is the most problematic issue for foreign-born professors in achieving professional success (Skachkova, 2007), four research questions guide this exploratory study:

RQ1: What outcomes of teaching with an accent do foreign-born faculty perceive?

RQ2: What instructional strategies are used to promote or ensure student understanding?

RQ3: What communication strategies are used with colleagues?

RQ4: What, if any, methods are employed to reduce accent?

METHODS

Context

The faculty interviewed teach at a predominantly White land-grant institution with 11,000 students in a rural area of the U.S. Northwest. Many of the students enrolled in the institution are first-generation college attendees who come from small rural communities with little exposure to racial, ethnic, or foreign-born diversity. The student body lacks significant diversity: 86% are White, and 4% are foreign-born students. Likewise, the vast majority of faculty members are U.S. citizens (86.9%); few faculty are noncitizens (3.7%) or permanent U.S. residents (9.4%). Additionally, most faculty (87.7%) identify English as their native language. Although the university embraces diversity and actively recruits diverse faculty members, the most recent faculty surveys indicate a monocultural environment, and results reveal that one-third of faculty do not believe it is very important or essential to "enhance students' knowledge of and appreciation for other racial/ethnic groups."

Interviewees

Twenty tenured or tenure-track foreign-born professors[1] who speak with an accent participated in in-depth, semistructured, face-to-face interviews. This sample represents 25.3% of the noncitizen and permanent U.S. residents on campus. Each participant was selected through snowball sampling, with initial contact established using a formal e-mail request. Eleven male and 9 female faculty

members (aged 30–66 years, $M = 49.3$) from 16 different countries were recruited (see Table 1 for participants' demographic information). They represent 12 disciplines and had an average of 11.2 years (range, 1–25) of teaching experience. Additionally, most participants spoke two to three different languages ($M = 2.7$ languages; range, 1–5). The accents of faculty were varied from light to heavy by self-report and on a scale from 1 (*light*) to 3 (*heavy*) by the interviewer.[2]

A White female undergraduate student was recruited to serve as the interviewer for this research study. To circumvent any potential perceptions of difference in ethnicity, race, or status, the interviewer was a native-born native speaker of English (cf. Wang, 1999–2000). The interviewer was trained in semistructured, in-depth interviewing techniques as well as the interview protocol used for this study. Each interview was audio-recorded and later transcribed. The duration of interviews ranged from 13 to 98 minutes ($M = 41.2$ min).

The interview protocol contained two categories of questions. The first category of questions concerned demographic information such as nationality, years living and teaching in the United States, highest degree obtained, and level of classes taught. The second category of questions pertained to participants' experiences in and out of the classroom with students and colleagues (see the appendix for a list of interview questions). At the end of each interview, the participant was asked if there was anything else she or he would like to share with the interviewer.

All interviews were transcribed verbatim, resulting in 193 single-spaced pages of transcribed interview data (equal to 9.65 pages per interview). All interview data were entered into NVivo8 software, which is designed for detailed coding and analysis of qualitative data, and a cross-case analysis was conducted (Pittman, 2010). In each transcript, the interviewees' responses were isolated, and the author developed a coding scheme by combining Blumer's (1979) and Glaser and Strauss's (1967) data analysis models to form concise categories from raw data. Development of the coding scheme was

Table 1. *Participants' Demographic Information*

Name	Sex	Field	Country of origin	Yrs. in U.S.	Yrs. teaching in U.S.
Saki	F	Foreign lang.	Japan	15	8
Lorenza	F	Liberal arts	Italy	5	5
Betulio	M	Social sci.	Venezuela	15	10
Berel	M	STEM	Israel	25	25
Amando	M	Foreign lang.	Mexico	20	20
Clifford	M	Liberal arts	England	9	3
Darshan	M	Agriculture	India	30	25
Mychael	M	STEM	Germany	24	21
Alima	F	Art	Palestine	21	15
Sabin	M	Social sci.	Nepal	6	1
Steffen	M	Foreign lang.	Germany	29	22
Abeeku	M	Social sci.	Ghana	8	5
Jin	M	Social sci.	Korea	11	2
Johar	M	Social sci.	India	7	7
Devika	F	Liberal arts	India	4	4
Ting	F	Agriculture	China	14	6
Rebekka	F	STEM	Germany	20	15
Polina	F	STEM	Russia	12	12
Svitlana	F	Agriculture	Ukraine	19	9
Paulina	F	STEM	Turkey	9	9

a twofold process: the author first identified all distinct elements in the raw data and then placed these distinct elements into common categories based on emerging themes of communication strategies. The unit of analysis was any phrase (i.e., a distinct element) a professor uttered.

RESULTS

Accent Outcomes

When faculty were asked what effect their accent had on teaching, responses could be characterized by three overarching categories: their accents had negative effects or outcomes on their interaction with students, their accents had no effect on their interactions with students, and their accents had positive effects on their interactions with students. As with qualitative research, participants provided multiple answers to open-ended questions; these answers may have revealed data that could have been coded as negative outcomes, no effect, and positive outcomes.

Negative outcomes. While only nine professors (45%) reported their accents to be an actual barrier to effective communication in the classroom, the majority of the interviewees (65%) reported receiving negative comments about their accents from students, and these negative student comments were conveyed face-to-face, lodged with the department chairs, or written on professor evaluation forms. These results indicate a noticeable disconnect in the minds of the professors between having a problem in the classroom because of their accents and receiving negative student comments about their accents. This detachment may result from not wanting to recognize the impact of their own accents on students or the social desirability of not having one's accent affect his or her teaching capabilities.

Common themes regarding the negative outcomes of speaking accented English centered on students' feelings of anger, hostility, or

aggression in the classroom as well as students losing patience and showing open defiance. As a result, professors experienced feelings of frustration, discrimination, and some loss of confidence. One female Italian professor who teaches foreign language and classics related the following incident, when a student came to her office with a complaint about her accent: "He told me, 'Honestly, I can't understand even half of what you say in class,' as if to say, 'Well, I took a D because I cannot understand you because *you are not understandable.*'" Professors' reactions to these complaints ranged from directly confronting student expectations to resignation of the negative outcomes. For example, the female Italian professor responded to the student by saying, "Well, you [the student] have to be grateful that you have a native speaker that teaches you the language, and you have to expect the accent." A male professor of Mexican descent seemed more resigned as he noted, "Sometimes they [students] have this kind of idea that because you had an accent or because you misplace or mispronounce some words, you are stupid." A female Indian instructor related her experience of encountering discrimination on campus that she contested. When she was an international graduate student, she asked a campus staff member who worked at the student recreation center where the pharmacy was located on campus:

> Because she could tell that the accent was different from an American accent, she started speaking to me extremely loudly because if I'm not talking like an American, I must be obviously deaf and also in a very slow manner.

Though the instructor challenged the staff member directly with the staff member's assumptions, the interaction reveals how her accent was used as a marker, a defining characteristic that led to marginalization. Her experience certainly supports Marvasti's (2005) observation that "language, even accent, may be used as a

proxy for an individual's level of skills and lead to prejudice and discriminatory behavior in the work environment" (p. 154).

Seven faculty members (35%) felt students used their accents as an excuse for the students' poor performance in class. As one male German professor observed, "When the accent gets heavy, then students get very intolerant." Another interviewee offered this comment: "But I tend to think that, generally speaking, the students take the accent of a professor as an excuse to justify themselves, that maybe the fact that they are failing that course." The most powerful comment regarding this theme came from a female Italian professor, who said, "Again, when I see that students use this [accent] as a weapon, I get hurt, but also frustrated because in that case I don't know what to do." Clearly this professor was upset and disturbed by having a personal quality—her accent—being used as an excuse for students' poor performance, and this comment also confirms Skachkova's (2007) assertion that accent is the most problematic aspect of being a foreign-born faculty member.

No effect. When participants were asked how their accents affected their interactions with students, the majority of participants (12 interviewees) remarked that their accents were "not a problem" and did not interfere with or present a barrier to conveying information to students. Six faculty members mentioned that the complexity of the material, not their accents, caused misunderstanding for their students. One male Venezuelan professor commented,

> I have encountered situations, several, in which students find it difficult to understand the way in which I communicate information, especially at the lower level courses; but it is mostly due to the language that I use or the level of language to the extent that I've had to, for lack of a better saying, dumb it down a bit.

When a male German professor was asked if students requested clarification during lecture, he stated, "They [students] only ask

[questions] because I didn't explain the physics right, but not because I explained it with a heavy accent." Another interviewee from Germany wished that student misunderstanding was a result of the information, not accent, when he said, "Sometimes they have a problem in content rather than, I hope, in understanding." This comment alludes to the professor's concern that his accent may be the root of student misunderstanding, but he would rather believe the course material is causing confusion.

Positive outcomes. Twelve professors (60%) believed that speaking with an accent resulted in positive effects for students. For example, professors felt teaching with an accent increased students' exposure to diversity and gave students a better understanding of the increasingly global workplace and world. As a female German professor said,

> I don't think it's [an accent] ever been an issue other than that it's been very positive in terms of enriching the environment, enriching the culture, diversity of the class which was my own experience where students are interested in trying to explore more, getting more acquainted with me and finding out more about my culture, heritage.

Additionally, a male Indian professor who teaches clinical counseling stated,

> I am exposing kids to a different aspect. . . . Students are expected to work with clients with different backgrounds, so I think that is a fortunate thing in my instruction [for] my students an opportunity to work with a different—a person of a different culture, or background, or different accent.

Both remarks illustrate how foreign-born faculty members perceive their cultural and linguistic differences as enhancements to

the learning environment. The notion that diversity is an asset is captured by a female Middle Eastern professor, who said,

> I don't want us all to be like that . . . sameness. I don't like sameness ever, I've never liked sameness and so variety is our strength actually, it is really the beauty of this whole kind of interaction.

Again, this remark illustrates that foreign-born faculty bring both diversity and strength into the primarily monocultural and monolingual classroom.

A female Japanese professor who taught a foreign language described another positive outcome. She observed that she is a good role model for second language learners:

> It's good for them that I am not a native speaker of English—and that I have a lesson that I have errors and make mistakes, so that you [a student] can do the same way when you speak Japanese.

By showing her students that she is not afraid or embarrassed to make mistakes when speaking a second language (i.e., English), she inspires and empowers her students to do the same—to speak a second language without apprehension or anxiety.

The majority of foreign-born professors who speak with accented English related practical and constructive benefits for students. Professors spoke of having conversations about their home countries and ethnic practices with students. Many of these outcomes centered on bringing diversity and a global perspective into the classroom and echoed Nimoh's (2010) point that foreign-born faculty provide unique opportunities for students to learn about cultural diversity in their own classrooms.

Communication Strategies With Students

"Overcoming the accent" inside the classroom. Inside the classroom, foreign-born professors use a variety of instructional strategies

to ensure that their accents are not barriers to student learning. As one male Indian professor said, "There are so many ways to overcome the accent." Interviews revealed that professors who speak with an accent use specific nonverbal and verbal communication methods as well as written communication to present information to students. While some of these communication strategies are common to both nonnative and native professors, some techniques may be unique to foreign-born faculty.

Professors who have an accent use a variety of verbal communication strategies to convey lecture material in the classroom. Thirteen participants (65%) mentioned particular verbal delivery strategies to communicate information to students. These verbal methods included repeating and rephrasing information (10 participants), giving examples (1 participant), and avoiding certain words that one cannot pronounce (1 participant). Although native-speaking professors utilize many of these same communication tactics, the idea of avoiding particular words during a lecture is unique to instructional communication research. A female Italian professor related,

> I know there are words I try to avoid, sometimes looking for synonyms, but sometimes you don't have time and so, there are words that I cannot pronounce, very simple—very simple for you, English speakers—for example, air, *a-i-r,* but I know that I mispronounce, I know what is it, I know the spelling, but I cannot pronounce it correctly.

This verbal communication strategy of spelling a word out loud is an unusual, practical tactic to ensure students' understanding of a word that may be difficult to pronounce while acknowledging that the professor's accent may cause student misunderstanding.

Almost half of the faculty (nine participants) also noted specific nonverbal communication strategies that supplement their verbal communication strategies in the classroom. In particular, seven participants mentioned slowing down their rate of speech

to enhance student comprehension. Additionally, two participants stated that they try to enunciate clearly while lecturing to promote student understanding.

The most common nonverbal communication strategy used inside the classroom was for faculty to "read" or rely on their interpretations of their students' nonverbal communication to determine comprehension of material. Forty percent of the participants mentioned that they focus on their students' nonverbal behaviors to reveal if course material is being understood. As one male professor from Ghana stated,

> You can feel something just by looking at people, looking at their face, they will be going "yes." But if you look at the face, it will be like [interviewee made inquisitive look]; you know they don't get it. So you take it upon yourself and you go back in, you explain the concept again and you try to go slow. Sometimes you use different words that would be easier for them to understand and stuff.

His comment clearly illustrates his ability to understand the nonverbal communication demonstrated by his American students; in fact, he considered his ability to decipher nonverbal communication central to his teaching effectiveness, and one may argue that he may have a heightened sensitivity to students' nonverbal communication.

Finally, 14 faculty members (70%) also cited written communication strategies they use inside the classroom to ensure comprehension. Eleven professors use PowerPoint and other visual aids as well as distributed written lecture notes or handouts to increase student understanding. PowerPoint and visual aids are not unique to foreign-born faculty; native faculty also frequently use these techniques. However, another commonly used technique to promote comprehension is writing words on a chalk or white board. Six professors stated that they write a word out instead of

relying on their pronunciation of the word. As one male Indian professor related, "Usually I write that word, so when I will spell that word they will understand; when I am pronouncing that [word] they might not understand." These practices of providing written material mirror Alberts's (2008) findings that students appreciate extensive notes or PowerPoint slides so they can see a word, even if they cannot understand the professor's pronunciation of it.

These findings demonstrate that foreign-born faculty who speak accented English depend on a variety of communication strategies to promote student understanding in the classroom. Specifically, verbal communication strategies (including repeating and rephrasing, giving examples, and avoiding or spelling words) as well as nonverbal strategies that complement verbal communication strategies (slowing of speech rate and enunciating clearly) are used to deliver information to students. Additionally, faculty use written communication strategies (visual aids, PowerPoint slides, and writing words on the white or chalk board) to convey information. Faculty also interpret student nonverbal communication behaviors, specifically kinesic behaviors, to assess student understanding.

Interaction aspects of communicating in the classroom. Accented professors employ an assortment of practices to effectively interact with their students. Fourteen professors (70%) welcomed student questions at any point during the classroom interaction, even if they were in the middle of a lecture. As one female Indian professor stated,

> On the very first day of any class I'm teaching, I always tell them that please feel free to interrupt me at any point of time if you're having a hard time understanding something that I'm saying or if a particular word is not clear to you.

Not only does this faculty member encourage questions but she also acknowledges her accented speech early in the class, opening up opportunities for dialogue. Other faculty interviewed perceived student

questions as a result of their accented speech as fair and reasonable; they found nothing insulting about this questioning practice.

Another technique to ensure effective communication with students was to ask students for help. Five professors often asked their students how to pronounce a particular word or asked students to help them think of a specific word while teaching. For instance, a female professor from the Middle East related, "Even now and then I get the students to just help, I get stuck on a word and I want to pronounce it and then they'll say it [the word], I say 'bravo!'" These professors welcome and invite student assistance; they do not perceive such requests as a weakness or a challenge to their authority in the classroom.

A common theme that emerged from the interviews was the use of humor. Nine professors made fun of their accents or their pronunciations of certain words. A female professor from Italy said, "In class, I joke about my accent; I involve them [students] when it is the case of a word that, at that very moment, I cannot recall or I cannot pronounce." A male British professor remarked that his accent allows him to make sarcastic comments without consequences: "I think I can joke and interact with the students at a deeper level. . . . My accent seems to give me some permission to do that, I can be sarcastic if I accent it."

Whereas humor is utilized as a strategy to build rapport, only two professors experienced students making jokes about their accents. A female Indian professor remarked,

> Sometimes they have even made fun of my accent in front of me; but it's not being disrespectful, you know, they have just mimicked something and I have said and I have mimicked them right back or something, it's just been very silly, playful back and other things, so it's not been a problem, it's not been a concern at all.

When asked about what the students have mimicked back, she said that it was her pronunciation of *tomatoes*. Whether humor is used by professors or students, it illustrates a level of comfort with and acceptance of the foreign-born faculty member's accent within the classroom.

Communication Strategies Used With Colleagues

The majority of professors (12 interviewees) reported no problems communicating with their colleagues and peers; however, during the course of the interviews, 11 professors recounted problems when communicating with their peers. Of those 11 professors who experienced problems, 6 faculty who previously indicated that they did not have problems communicating with their colleagues later recalled that they had experienced problems communicating with other faculty members at some point during their careers.

Four participants (20%) indicated that they reduce or eliminate communication during certain difficult situations. A male Ghanaian professor stated, "Some situations become very intimidating; if you don't have the language skill to be in that setting, then you kind of pull back a little bit." Another male professor from Korea shared the following:

> Sometimes I am a little bit reluctant to have [an] active conversation with other faculty members because sometimes I feel faculty members may not understand my accent, but that's my assumption, I don't know how they feel.

In a similar vein, a female professor of Japanese descent shared how her accent and culture shape her level of participation in formal settings with colleagues:

> Actually, I don't speak very much, like [at] conferences and meetings, because American people just keep talking and then

> I can't just jump in, because that's considered very rude in Japanese culture. So it's waiting, then I want to say, but I never have the chance to get in, so usually I don't speak very much in the meeting or something like that.

Her comments confirm previous research findings about cultural differences in conversational turn taking (Yang, 2007) and about the use of silence by the Japanese (Nakane, 2006).

To facilitate communication with their colleagues, 11 professors cited specific communication strategies, including repeating or phrasing communications (8 participants), giving examples to illustrate main points (2 participants), asking colleagues to correct them (2 participants), and spelling out words that are difficult to understand because of accent (1 participant). Additionally, three professors mentioned particular mind-sets when communicating with their peers; one professor said, "I try just to be strong, I try to be calm," whereas another person stated, "But in [a] more formal situation I pretend to be confident, but I don't feel that confident, because I always have to think about what term to use." These mind-sets indicate a lack of confidence and some self-doubt in more formal settings with colleagues.

Reducing Accent

Thirteen interviewees (65%) have either engaged in formal or informal actions to reduce their accents or believe there should be formal structures within the university to help instructors who want to reduce their accents. Specifically, five faculty members (25%) have taken accent-reduction classes or English pronunciation classes to reduce their accents, and six other faculty members believe the university should have formal mechanisms in place to help foreign-born scholars reduce their accents. Additionally, one professor remarked that if she receives negative student comments about her accent, she can cite her formal accent-

reduction classes as a way to refute negative student comments.

Moreover, seven faculty said they pursued informal methods to help with pronunciation and accent. These informal methods included listening to television or radio, as one male Korean professor remarked: "I usually watch the TV at night to learn how the native speakers speak, so that's how I try to improve the communication skills or to have better [American] accent." Other informal methods to reduce accent included engaging in informal conversations: "just regular conversation, and the more conversation I did, the better I got." These informal means of reducing accent indicate that foreign-born faculty are not satisfied with their accents and are making efforts to lessen them.

Of the 13 professors who engaged in actions to reduce their accents or believe there should be university resources to reduce one's accent, a little over one-half (7 professors) stated that their accents did not present a problem for classroom interaction. These professors may not encounter problems or issues with their accents because they have sought methods to reduce their accents.

CONCLUSION AND IMPLICATIONS

The findings from this study of foreign-born faculty narratives concerning their professional experiences demonstrate both the opportunities and challenges the faculty face. The majority of the faculty received negative student comments about their accents, but most interviewees felt that their accents were not a barrier to effective communication with students. These conflicting results represent a disconnect between receiving negative student comments and not perceiving that one's accent may present an obstacle to effective communication in the classroom. This disconnect may be an artifact of social desirability; it may show that foreign-born faculty do not want to accept that accent may affect communication with students; or it may reflect, at least in part, that students find

the course material complex and challenging. Indeed, recruiting foreign-born faculty to discuss the role of accent in their professional lives was challenging. Although these particular faculty were willing to discuss their experiences as foreign-born faculty members, other potential participants either ignored the request to participate in the study or refused to participate. A commonly cited reason for nonparticipation was that the faculty member did not think that accent affected his or her professional life, which only reinforces the findings of this study.

Several foreign-born faculty lamented that their accents had been used as an excuse for poor student performance, which confirms that students prefer American English and intelligible foreign accents to unintelligible foreign accents (Bresnahan et al., 2002). Conversely, other foreign-born faculty felt that their accents exposed students to diversity and increased the students' global awareness. Although these findings illustrate advantages and disadvantages to enrolling in a course taught by a professor who speaks with accented English, we must try to change the prevailing student perspective about this issue by developing a more inclusive linguistic landscape in our institutions. If students are exposed to more instructors who speak accented English, through the employment of more international teaching assistants and scholars, then students may alter their perceptions about accent, which, in turn, will change the perception of teaching effectiveness.

This study uniquely addresses Alberts's (2008) assertion that foreign-born faculty should acknowledge that their accents may be difficult for students to understand and that these faculty should find methods to assist their students in understanding them. Results from this study support that foreign-born faculty members select specific written communication means (e.g., lecture notes, PowerPoint slides, and writing words on chalk or white boards) to acknowledge their accents and potentially overcome problems caused by accent. Additionally, faculty can recall particular verbal

communication strategies, such as repetition, slowing of speech rate, enunciating, and avoiding or spelling words that are difficult for students to understand, that promote effective communication in the classroom. By understanding communication strategies used by foreign-born faculty, native-born administrators and faculty who may be evaluating these nonnative speaking faculty will have the opportunity to acquire a more complete picture of how they work diligently to communicate effectively with students.

Most foreign-born faculty reported experiencing misunderstandings or other communication problems with their colleagues. They employed some of the same communication strategies used with their students, such as repeating and rephrasing and giving examples, to encourage effective communication with their colleagues. Yet a small contingency of foreign-born faculty either reduced or eliminated communication in formal settings such as during faculty meetings and conferences. On the basis of the current findings, to lessen the chance of faculty who speak accented English not participating in formal settings, we need to educate native-born administrators and faculty regarding the divergent communication patterns of foreign-born faculty. By doing so, administrators and other faculty can better help foreign-born faculty members have a voice in these settings.

Last, the majority of foreign-born faculty who speak with an accent have pursued either informal or formal means to reduce their accents or believe that a university should have formal mechanisms in place to help faculty who want to reduce their accents. This finding is new to instructional communication research, and we should question how this approach to reducing or eliminating accent may affect a faculty member's identity. As one participant stated, "variety is our strength," and we must question what it may mean to reduce our lingual variety and reinforce the monolingual model present in our institutions. Previous research has also echoed this sentiment, but from the student perspective,

when a student commented, "Don't lose your accent—that's my favorite part" (Chen, 2005, p. 40).

This study has limitations. First, the sample recruited for this study was from one institution; thus the context of the institution plays an important role when considering the findings of this study. Second, the sample size was not large enough to make distinctions between accent and other demographic characteristics (e.g., gender or country of origin) that may affect the experiences of foreign-born faculty. Future studies should examine the interplay of accent and gender. If a larger sample were to be obtained, then conclusions could be drawn regarding the differences between an accented foreign-born male professor and an accented foreign-born female professor. Additionally, future research could also explore urban, more culturally diverse universities to see if other foreign-born faculty report similar issues. Further research on the teaching experiences of faculty who speak with accented English is important given the growing numbers of foreign-born faculty. Sharing effective communication strategies will enhance the ability of faculty who speak accented English to communicate their expertise in the classroom and with their colleagues.

Universities will continue to recruit and retain diverse faculty members, including foreign-born faculty, but the institutional structure must support these valued members of the academy. To do so, universities must educate their administrators and faculty regarding divergent communication strategies. Differing accent and speech patterns must be seen as an asset to institutions and the educational process itself. If speaking accented English can be viewed as an asset instead of a liability, then we will allow additional diverse voices and perspectives to be heard within the academy. If this goal can be achieved, foreign-born faculty will experience less marginalization and isolation as well as fewer barriers to their own professional success. Foreign-born faculty who have reduced their communication with colleagues may be more

apt to express their viewpoints and experiences. There cannot be a singular, homogeneous way of interacting and communicating; diverse and divergent ways of communicating must be recognized and embraced.

APPENDIX: INTERVIEW QUESTIONS

Demographic Questions

- Age
- Sex
- Highest degree obtained
- Number of years living in the United States
- Number of years teaching and learning in the United States
- Classes taught (levels)
- Languages spoken
- When did you learn English?
- Where did you learn English?

Interview Questions

1. Did you anticipate any challenges when you started teaching in the United States in regard to your accent (being a nonnative speaker)?
2. In what ways does your accent affect student response to your teaching?
3. Does it enter into your teaching evaluations?
4. How typical is it that students have difficulty understanding your communication?
5. Are there certain situations in which it is more difficult for students to understand you?
6. How do you respond to a classroom situation when others may not fully understand what you are saying?

7 Does your accent affect interactions within your department or with other faculty?
8 Please share an experience in which your associates had difficulty understanding your English.
9 What strategies do you use to ensure others understand what you want to convey?
10 How does teaching with an accent affect your confidence level and self-concept in academic settings?
11 Is there anything about having an accent or teaching in your nonnative tongue that has surprised you? (Any surprising experiences relating to your accent?)
12 What advice would you give to U.S. teachers to more effectively work with students where English is not their first language?

NOTES

1 Other qualitative research studies conducted on instructors' accents have samples ranging from 7 participants (see McLean, 2007) to 34 participants (see Skachkova, 2007).
2 While the participants and interviewer rated the degree of accent, results revealed no difference between participants with light, moderate, and heavy accents.

REFERENCES

Alberts, H. C. (2008). The challenges and opportunities of foreign-born instructors in the classroom. *Journal of Geography in Higher Education, 32*, 189–203.

Baker, P., & Copp, M. (1997). Gender matters most: The interaction of gendered expectations, feminist course content, and pregnancy in student course evaluation. *Teaching Sociology, 25*, 29–43.

Bazemore, S. D., Janda, L. H., Derlega, V. J., & Paulson, J. F. (2010). The role of rejection in mediating the effects of stigma consciousness among foreign-born university professors. *Journal of Diversity in Higher Education, 3*, 85–96.

Blumer, M. (1979). Concepts in the analysis of qualitative data. *Sociological Review, 27*, 651–677.

Bresnahan, M. J., Okashi, R., Negashi, R., Liu, W. Y., & Shearman, S. M. (2002). Attitudinal and affective response toward accented English. *Language and Communication, 22*, 171–185.

Chen, G. (2005). Teaching communication with a foreign accent. *Intercultural Communication Studies, 4*(2), 14–22.

Collins, J. M. (2008). Coming to America: Challenges for faculty coming to United States' universities. *Journal of Geography in Higher Education, 32*, 179–188.

Corley, E. A., & Sabharwal, M. (2007). Foreign born academic scientists and engineers: Producing more and getting less than their U.S. born peers? *Research in Higher Education, 48*, 909–940.

Giles, H., & Johnson, P. (1987). Ethnolinguistic identity theory: A social psychological approach to language maintenance. *Foreign-Born Journal of the Sociology of Language, 68*, 69–99.

Gill, M. M. (1994). Accent and stereotypes: Their effect on perceptions of teachers and lecture comprehension. *Journal of Applied Communication Research, 22*, 348–361.

Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research.* Chicago: Aldine.

Gluszek, A., & Dovidio, J. F. (2010). Speaking with a non-native accent: Perceptions of bias, communication difficulties, and belonging in the United States. *Journal of Language and Social Psychology, 29*, 224–234.

Institute of International Education. (2009). *Open Doors 2009: Foreign-Born Scholars*. Retrieved from http://www.opendoors.iienetwork.org/page/Foreign-bornScholars2009/

Kim, D., Wolf-Wendel, L., & Twombly, S. (2011). International faculty: Experiences of academic life and productivity in U.S. universities. *Journal of Higher Education, 82*, 720–747.

Mamiseishvili, K., & Rosser, V. J. (2010). Foreign-born and citizen faculty in the United States: An examination of their productivity at research universities. *Research in Higher Education, 51*, 88–107.

Marvasti, A. (2005). U.S. academic institutions and perceived effectiveness of foreign-born faculty. *Journal of Economic Issues, 39*, 151–176.

McLean, C. A. (2007). Establishing credibility in the multicultural classroom: When the instructor speaks with an accent. *New Directions for Teaching and Learning, 110*, 15–24.

Nakane, I. (2006). Silence and politeness in intercultural communication in university seminars. *Journal of Pragmatics, 38*, 1811–1835.

Nimoh, P. (2010). Communication challenges faced by foreign-born faculty. *Creative Nursing, 16*, 59–62.

Pittman, C. T. (2010). Race and gender oppression in the classroom: The experiences of women faculty of color with White male students. *Teaching Sociology, 83*, 183–196.

Rubin, D. L., & Smith, K. (1990). Effects of accent, ethnicity, and lecture topic on undergraduates' perceptions of nonnative English-speaking teaching assistants. *Foreign-Born Journal of Intercultural Relations, 14*, 337–353.

Sabharwal, M. (2011). High-skilled immigrants: How satisfied are foreign-born scientists and engineers employed at American universities? *Review of Public Personnel Administration, 21*, 143–170.

Skachkova, P. (2007). Academic careers of immigrant women professors in the U.S. *Higher Education, 53*, 697–738.

Thweatt, T. S. (2003). University student attitudes towards foreign instructors. *North Dakota Journal of Speech and Theatre, 16*, 35–46.

Thomas, J. M., & Johnson, B. J. (2004). Perspectives of foreign-born faculty members: Their experiences and stories. *Education and Society, 22*, 47–64.

Vargas, L. (1999). When the "other" is the teacher: Implications of teacher diversity in higher education. *The Urban Review, 31*, 359–383.

Wang, J. (1999–2000). "Don't lose your accent!": American students and their foreign-born non-native speaker college instructors. *Intercultural Communication Studies, 9*(1), 31–46.

Wells, R., Seifert, T., Park, S., Reed, E., & Umbach, P. D. (2007). Job satisfaction of foreign-born faculty in U.S. higher education. *Journal of the Professoriate, 2*, 5–32.

Wulf, W. A. (2005). *The importance of foreign-born scientists and engineers to the security of the United States.* Testimony given at the Subcommittee on Immigration, Border Security, and Claims, U.S. House of Representatives, Washington, DC.

Yang, W.-D. (2007). Realizations of turn-taking in conversational interactions. *U.S.–China Foreign Language, 5*, 19–30.