



## Articles

# Grey's Anatomy and Communication Accommodation: Exploring Aspects of Nonverbal Interactions Portrayed in Media

Jason T. Mickel<sup>\*a</sup>, Shian-Li McGuire<sup>a</sup>, Shelley Gross-Gray<sup>a</sup>

[a] Department of Communications Media, Indiana University of Pennsylvania, Indiana, United States.

## Abstract

This study explores nonverbal communication measured in a television medical drama using the NAAS framework for investigating doctor-patient interactions viewed through the lens of communication accommodation theory. It aims to find how doctors in the television series *Grey's Anatomy* exhibit a select set of nonverbal communication elements to accommodate their fictional patients. Of significance, the study draws attention to the impact of televised medical programs on real-life doctor-patient encounters, focusing on under-researched aspects of communication in this context. Eight episodes of the series *Grey's Anatomy* were coded for four nonverbal behaviors during physician consultations with a single patient in each program. Only the first and last minutes of conversation were included in the analysis. Descriptive statistics demonstrate how doctors and patients behave in general across all episodes. A factor calculated from differences of proportions between patient and physician behaviors indicates whether doctors accommodate patients and consequently influence patient satisfaction. The analysis finds that the amount of nonverbal behavior between the parties was balanced, with doctors accommodating and not accommodating in equal frequency. The study discusses the implications not only on medical drama but also on the professional medical field, noting that television not only reflects real-life but also can establish communication expectations for better or worse. Utilizing the NAAS to understand how fictionalized interactions occur informs the medical community on how better to prepare doctors for patient communication.

**Keywords:** communication accommodation, nonverbal communication, television medical drama, doctor-patient communication, content analysis

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\*Corresponding author at: Department of Communications Media, Indiana University of Pennsylvania, 121 Stouffer Hall, Indiana, PA 15705, United States.  
E-mail: j.t.mickel@iup.edu



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Communication in the health care environment has multiple layers that both help and hinder the processes vital to its proper functioning (Oetzel, 2009, p. 242). Television medical dramas contribute to patient expectations of their physicians because producers attempt to imitate reality through scripts, and in turn, the ideals portrayed in an hour-long program are assumed to occur in real life (Vendekieft, 2004, p. 216). Using communication accommodation theory as a basis, this study aims to determine how a television medical drama demonstrates physicians' abilities to create satisfaction in the doctor-patient relationship. Communication has both verbal and nonverbal facets. This study desires to investigate nonverbal behaviors exhibited by both parties. Using a method for understanding accommodation in this context, we perform a content analysis of a television series to explore how nonverbal activities can be quantified to measure the degree to which doctors accommodate or fail to accommodate patients in fictional narratives.

## Review of the Literature

### Physician-Patient Communication

Patient-centered healthcare is the current approach of physicians communicating with patients. The communication process between physicians and patients can be complicated by any number of factors — two of which are language and cultural differences. The majority of research on physician and patient communication is based on surveys, interviews, and videotaped sessions. [Suurmond and Seeleman's \(2006\)](#) exploratory paper identified four barriers in the interaction between physicians and patients. The barriers were: (1) physician and patient may not share the same linguistic background; (2) physician and patient may not share similar values about health and illness; (3) physician and patient may not have similar role expectations; and (4) physician and patient may have prejudices and do not speak to each other in an unbiased manner ([Schouten & Meeuwesen, 2006](#); [Suurmond & Seeleman, 2006](#)).

The creation of effective healthcare videos follows the community engagement model to design appropriate media. The study by [Ulrey and Amason \(2001\)](#), in which data was collected from employees in a community health center, serves to aid the development of communication training programs for healthcare providers by examining how sensitivity and effective communication, besides helping patients, personally benefit healthcare providers by reducing their stress. Healthcare providers' levels of anxiety also were found to correlate with effective communication and reduced stress levels may lead to higher quality medical care that, in turn, benefits the patient ([Ulrey & Amason, 2001](#)).

### Television Medical Dramas

The earliest TV medical dramas struggled to balance reality with drama ([Vendekieft, 2004](#), p. 229), featuring doctors as heroes who could do little wrong ([Strauman & Goodier, 2011](#)). Technological advances in medicine resulted in less personal doctor-patient relationships ([Vendekieft, 2004](#), p. 217) resulting in medical dramas becoming grittier and displaying doctors committed to the profession but who have personal demons ([Vendekieft, 2004](#), pp. 225–227). Most recently, medical series combine these concepts of the doctor-hero and personal drama, leaving an environment in which the doctors are the focus and patients are seen little and speak even less ([Makoul & Peer, 2004](#), p. 258).

Television medical dramas depicting communication between physician and patient are generally experienced as positive by the majority of viewers who see medical personnel presented in positive situations often with heroic outcomes ([Strauman & Goodier, 2011](#)). [Quick \(2009\)](#) points out that the perceived credibility of characters and plots on shows such as *Grey's Anatomy* can lead to greater satisfaction with one's own real life physician even though a real life physician cannot live up to the one portrayed on television. However, this portrayal can create a platform for effective health promotion ([Quick, 2009](#)).

### Communication Accommodation Theory

Communication accommodation theory (CAT) is a model for understanding the way two people interact with each other and revolves around the principle that their interaction is fundamentally transactional in nature ([Coupland, Coupland, Giles, & Henwood, 1988](#); [Giles, 1973](#)). People are thought to make behavioral adjustments to manage their levels of social distance when interacting with others, and CAT provides a theoretical basis to forecast and account for such adjustments. One of the strategies comprising CAT is *approximation*, which involves *convergence*

and *divergence* defined as whether individuals are adjusting their behaviors to *match* or *differentiate* their speech and nonverbal communication to another's style (Coupland et al., 1988).

Ideally, information among physician and patient would be exchanged openly and equally; however, in reality, the amount of knowledge and expertise physicians have in their field creates a disparity between them and the patient. This gap results in more of a complementary relationship than an egalitarian one, which is evident in how they ultimately communicate (D'Agostino & Bylund, 2011a). The nature of this complementary relationship and the accommodating behaviors of both parties have been defined by the customs and standards associated with their respective roles and the intergroup relationships that exist among them (D'Agostino & Bylund, 2011a).

The CAT model has previously been used to investigate physician-patient communication and interaction: Watson and Gallois (1998) adapted CAT as a method for understanding the role that nurturing communication plays during interpersonal interactions among health professionals and patients. Hewett, Watson, Gallois, Ward, and Leggett (2009) used CAT as a mechanism to explore intergroup communication between hospital doctors and the implications it has on levels of patient care. These two studies were limited, however, to the verbal side of communication and failed to consider the non-verbal portion of physician-patient interaction, which is equally telling when seeking to fully understand the dynamic (Finset, 2007). In fact, most applications of CAT focus on the verbal component, with the nonverbal side occurring less frequently in the literature (Mast, 2007), making the NAAS potentially useful.

### **Nonverbal Communication Between Physician and Patient**

While verbal communication has received more attention, much of the literature on nonverbal behaviors has connected nonverbal behaviors to provider, patient, and communication outcomes (Mast, 2007; Robinson, 2006). Examples of nonverbal communication present in the literature include: gaze orientation, eye contact, head nodding, physician gesturing, physician proximity and lean, tone of voice, expressiveness and body position. More specifically, Beck, Daughtridge, and Sloane (2002) found that there are 16 different nonverbal behaviors such as these that are significantly linked to patient satisfaction and compliance. Nonverbal behaviors that are thought to imply power or dominance have been reported as negatively impacting patient outcomes; examples include interruptions and silence (Street & Buller, 1987).

Physician speed and volume of talking correlate with patient satisfaction levels (Ishikawa et al., 2006). Physicians with previous malpractice claims are significantly connected to ratings of lower concern in tone of physician voice and higher dominance (Ambady et al., 2002). Conversely, physicians' use of positive words delivered in a negative tone resulted in higher patient satisfaction levels (Hall, Roter, & Rand, 1981).

### **Purpose and Significance of the Study**

To investigate communication accommodation theory in a nonverbal context on medical television programming, we chose to explore how it applies to mediated doctor-patient interactions. This preliminary look does not intend to draw broader conclusions about how nonverbal communication in all medical television dramas, but rather it aims at finding a measurement applicable to the mediated context that could be applied more widely. In this respect, the purpose of the study is to determine use and frequency of nonverbal communication actions that indicate how doctors accommodate patients in a fictionalized environment. Because television production limits the viewer to selected images, we will explore only audible elements that can be tracked without the requirement of a camera being focused on the active subject.

The study is significant in that it explores how a popular television program shapes how patients perceive communication in real-life medical interactions. Patients must feel satisfaction from their interactions or it risks not only the individual's trust of the doctor but also the trust in the greater medical community. Patients have a responsibility to participate in their health care; however, this is difficult for patients who lack general knowledge of their medical condition, who overinvest in the information provided through fictional media, or who do not understand the American health care system.

### Research Questions

RQ1: How are nonverbal actions distributed among the parties during doctor-patient interactions on *Grey's Anatomy*?

RQ2: How frequently do doctors portrayed on *Grey's Anatomy* converge on and diverge from patients in nonverbal communication?

### Operational Definitions

**Nonverbal Behaviors (Actions):** Communicative behaviors either distinct from speech or implicit aspects of speech (D'Agostino & Bylund, 2011b). Paraverbal and nonverbal behaviors will be defined under this term, herein.

**Convergence:** Aspect of communication accommodation characterized by one or more parties in a conversation adjusting behavior toward the other party (Gallois, Ogay, & Giles, 2005).

**Divergence:** Aspect of communication accommodation characterized by one or more parties in a conversation adjusting behavior away from the other party (Gallois et al., 2005).

**Non-convergence:** For the purpose of this study, one or more parties in a conversation do not adjust their behavior either toward or away from the other.

## Methods

### Nonverbal Accommodation Analysis System

The Nonverbal Accommodation Analysis System (NAAS) framework satisfies a need for a mechanism to measure nonverbal communication within the CAT model, measuring ten specific nonverbal or paraverbal behaviors between physician and patient. These ten behaviors include talk time, pauses, interruption, simultaneous speech, speech rate, eye contact, smile, laugh, nodding, and gesturing. High-levels of inter-coder ( $r = .81$  to  $r = .96$ ,  $p < .01$ ) and intra-coder ( $r = .82$  to  $r = 1.0$ ,  $p < .01$ ) reliability were found and are the expected result of the NAAS's reliance on highly specified behaviors rather than on making personal judgment ratings of categorical behaviors (D'Agostino & Bylund, 2011a). Content and construct validity was measured and found to be at acceptable levels (D'Agostino & Bylund, 2011a).

Because the NAAS was developed using videotaped versions of real consultations, we believed it had the ability to serve as a measurement for fictionalized conditions, as well. Accordingly, a content analysis of television episodes coded using the elements of the NAAS proved appropriate for understanding the communication structures present in medical dramas.

## Sampling

Because of the exploratory nature of this study, we chose to examine a single medical television drama series, *Grey's Anatomy* (GA). GA, in its eighth season as of this writing, airs on Thursday nights on the ABC network in the United States. GA features an ensemble cast of doctors in a Seattle hospital who not only cope with the daily issues of the medical profession but also face the tribulations of personal relationships complicated by the issues inherent in a stressful work environment ("About the show – *Grey's Anatomy*," n.d.). Each episode features one or more patient encounters with the hospital staff, which typically are interspersed throughout the forty-three minutes of each episode's airtime.

We purposively chose episodes from the first seven seasons of GA that originally aired during the "sweeps" periods of American television. Episodes airing during the sweeps period often feature more highly dramatized events in order to draw higher viewership (Gross, 1997, p. 1348). We anticipated that these episodes would better focus on a balance between doctor-patient interactions and the personal lives of the cast rather than episodes airing outside of these periods. From the subset of sweeps episodes, two shows from each of the first six seasons were randomly chosen for coding in an attempt to generalize the results to the series as a whole. An error in accessing episodes caused only one episode from season five to be coded with an additional episode from season two to be included. One episode from the seventh season was chosen for coding to determine inter-coder reliability; the results from this episode's coding do not factor in the overall analysis. The authors coded a total of twelve episodes. The Appendix lists the programs viewed.

## Coding Process

The coders were the three authors of this study, all doctoral candidates in communications media with previous experience performing media content analyses. We accessed the episodes through the Netflix online streaming media service, which allowed us to access previous seasons as well as easily denote time codes. Viewing and coding was performed independently.

Following the approach of the original NAAS study, we elected to code doctor-patient interactions in minute-long segments. The original research justified coding the opening two minutes and the closing two minutes of each consultation by noting that "thin slices" of observation can provide as much information as a complete inspection (Ambady & Rosenthal, 1992). Television necessitates airing dramatized consultations in a compressed time format; therefore, we modified the original method to capture minute-long portions of interactions that appeared at any time during an episode. Mirroring the NAAS development approach, we coded no more than four minutes of interactions for each episode.

The differences between real and dramatized consultations present issues that must be considered prior to the coding process. First, fictional television intends to entertain; therefore, the actions and dialogue in the script may be more sensational than in a typical real doctor-patient meeting. Second, in drama, production choices deliberately determine what the viewer sees; consequently, nonverbal actions may be more emphasized than in a real consultation in which either a single camera covers the entire interaction or multiple cameras can be examined equally for content. Third, the hour-long format permits a limited amount of time devoted to patient contact; therefore, the small number of meetings may present difficulty in obtaining sufficient data (O'Donnell, 2007, pp. 121–122). Finally, as a dramatic series, time will understandably be devoted to the personal lives of the doctors (O'Donnell, 2007, pp. 121–122).

Although all ten elements of the NAAS may be measured in a dramatized context, we chose to code a subset during this preliminary investigation. Based on the concerns over the differences between real and fictional meetings expressed above, we believed that the four aspects selected would provide an understanding of the potential for NAAS to apply to television without camera shot choice influencing the analysis. In addition to the doctor and patient, the selected aspects monitor a “significant other” who may be present at the consultation; however, this data will not be factored into the analysis for this paper. The four elements used in this analysis are defined in Table 1.

Table 1

*Subset of NAAS Behavior Categories Coded (D’Agostino & Bylund, 2011a)*

NAAS Element	Definition
Talk Time	The proportion of each minute that the conversational party talks for.
Pauses	The proportion of each minute that the conversational party pauses for.
Simultaneous Speech	Any instance where the first speaker is still speaking when the second speaker begins to speak, but the second speaker does not take the floor from the first speaker. This includes both back channels and unsuccessful interruptions. Proportion per minute calculated for each conversational party.
Interruption Frequency	Defined as a situation in which the first speaker is still speaking when the second speaker begins to speak, and the second speaker continues speaking while the first speaker stops. Proportion of interruption per amount of conversational partner’s raw Talk Time is calculated.

Coders watched an episode as many times as necessary to sufficiently gather the required data. Following the NAAS coding manual, each of the NAAS elements was coded on a preformatted coding sheet for the number of seconds the action occurred during the minute of action examined. The start and end time code based on the episode length of each minute-long segment was indicated, as well. To account for the unique nature of television, two modifications were made to the coding manual. First, if a single interaction spanned a commercial break or a cut to another scene, the separate segments would be considered as one continuous minute for coding. Second, only doctor-patient interactions occurring in a medical context would be considered for analysis. For example, an encounter between a doctor and patient in a parking lot discussing unrelated personal matters would be invalid. *GA* features several consultations occurring with multiple doctors, often in a teaching situation. In these instances, all of the doctors’ actions are grouped under a single physician category for the purpose of analysis.

In order to maintain applicability of CAT, only conversations between a single doctor and single patient should be considered. The core story within *GA* is the use of the hospital in residency rotations; therefore, multiple doctors treat the same patient throughout a single episode. To best approximate the conditions in the original NAAS study, only episodes with segments that portrayed the doctors working with the same patient throughout the episode were considered for further analysis. This requirement reduced our number of acceptable segments from forty-one to twenty-five, and the number of acceptable episodes reduced from twelve to eight.

The coding process also revealed that the number of segments featuring the same patient varies from episode to episode. To account for this, only the first and last minute of coding for each episode will be analyzed. Although this reduces the time available for interpreting nonverbal actions and accommodation, the formulaic nature of the workplace drama finds several interweaving storylines needing to be resolved within the hour (O’Donnell, 2007, p. 105); therefore, the few minutes of contact in fiction signify a longer consultation in reality. This restriction left sixteen segments over the eight remaining episodes to be included in the final analysis of the study.

## Interpretation of Results

No widely accepted methods of interpretation of nonverbal CAT results or of the NAAS were available within the literature. The only previously available quantitative examination of television medical dramas we found involved the application of descriptive adjectives to describe doctors and patients in the context of a scene (Makoul & Peer, 2004, pp. 250–251). After consulting with the primary author of the NAAS measurement, we established a basic system for understanding physician accommodation toward a patient. The terms *convergence*, *non-convergence*, and *divergence* will be applied to comparative ratio differences between patient and physician nonverbal behaviors. *Convergence* denotes a change of at least 0.05 in which a physician reduces negative aspects or increases positive aspects of nonverbal functions. *Divergence* is indicated when a physician increases negative or decreases positive behaviors by at least 0.05. *Non-convergence* indicates no change in behavior more than 0.05, exclusive.

## Reliability

During the coding, a single episode from season seven, the most recent season of *GA* available on Netflix, was chosen to determine inter-coder reliability. We elected to use Krippendorff's alpha as the measurement because it was designed specifically for content analysis contexts, it accommodates more than two coders, and it handles ratio level data (Krippendorff, 2009). From the times coded for all four NAAS elements, a Krippendorff's alpha of 0.917 was calculated. Krippendorff (2009) suggests a minimum of 0.800 to establish reliability. To determine the accommodation factor, the difference between the last minute and first minute values was calculated for each variable and party, then the difference of changes between the patient and the physician was calculated for each variable.

## Results

Table 2 indicates the overall descriptive statistics as percentages of occurrence for talk time, pauses, and interruption frequency for physicians and patients. Coding found no instances of simultaneous speech; therefore, the category was removed from analysis. A paired t-test was run for each variable between physician and patient (talk time  $t = 0.860$ ; pauses  $t = -1.051$ ; interruptions  $t = -0.650$ ), and none revealed a significant difference at  $p < .05$ .

Table 2

*Descriptive Statistics for Series (in Percent)*

Category	Mean	Median	Std. Dev.
Talk Time - Physician	32.34	31.67	14.42
Talk Time - Patient	26.99	25.50	15.69
Pauses - Physician	3.15	3.33	2.91
Pauses - Patient	5.28	1.67	7.55
Interruptions - Physician	0.42	0	1.68
Interruptions - Patient	0.94	0	2.58

Table 3 indicates the results of applying the difference factors for convergence ( $f \geq 0.05$ ), divergence ( $f \leq -0.05$ ), and non-convergence ( $-0.05 < f < 0.05$ ) for each variable and episode. For talk time, convergence and divergence each occurred three times. Pauses had two physician convergences and two divergences. Interruptions featured two convergences by doctors. In episode 1-6, the physician converged in all three categories.

Table 3

*Accommodation Factors for Physician by Episode and Variable*

Episode	Talk Time	Talk Time Factor (f)	Pauses	Pause Factor (f)	Interruptions	Interrupt Factor (f)
1-6	Convergence	0.70	Convergence	0.11	Convergence	0.15
2-19	Convergence	0.07	Non-convergence	0	Non-convergence	0
2-20	Non-convergence	-0.03	Non-convergence	-0.02	Non-convergence	0
3-14	Divergence	-0.40	Divergence	-0.14	Convergence	0.07
4-6	Non-convergence	0.02	Divergence	-0.05	Non-convergence	0
5-8	Divergence	-0.16	Convergence	0.17	Non-convergence	0
6-8	Convergence	0.20	Non-convergence	0.02	Non-convergence	0
6-22	Divergence	-0.17	Non-convergence	0.03	Non-convergence	0

## Discussion

This study found that overall doctors and patients in *Grey's Anatomy* had equal speaking time, the same length of pauses, and interrupted the other as frequently as the subject was interrupted. Likewise, doctors accommodated patients through nonverbal means as often as they failed to accommodate in those same methods. This demonstrates that the show attempts to portray the physician-patient relationship on equal footing between the parties involved.

RQ1 asked how the nonverbal behaviors were distributed between doctors and patients on *GA* as a series. For each variable measured, the difference between physicians and patients was negligible. The mean speaking time for the doctors is slightly higher; however, the doctors may speak more often because regular viewers arguably care more about their activities than the guest patients. Conversely, audiences expect to receive health-related information from a television medical drama and for it to reflect their real-life hopes in a medical interaction; therefore, the balance of speaking time can also be expected (Lee & Taylor, 2010).

Pauses and interruption frequency lacked any significant variation, as well. In addition, pauses consumed very little airtime on average, and interruptions occurred even less often. In a real context, a pause indicates thought or a search for words; whereas, in fictional television, a pause creates a dramatic effect intended to emphasize emotions or the power of the words to follow. Interruptions similarly create a dramatic effect on television in which they demonstrate a shifting of power from one party to another. In the softer, personal world of *GA*, scripts may prefer to emphasize the power relationships between the doctors themselves rather than those with patients. The greater, albeit slight, number of patients interrupting doctors empowers the audience to take control of their real medical interactions.

The lack of simultaneous speech in the episodes alternately surprises and does not surprise. Like interruptions, simultaneous speech provides a dramatic struggle for power over the other party's right to speak in turn. Consequently, one would have expected to find it included at least once in the course of eight episodes, but in fact it was not found in episodes removed from the ultimate content analysis, either. Conversely, simultaneous speech also could prove distracting for the viewer as they attempt to decipher the narrative. The overload of sound creates a sense of tension, which if overused, may detract from the overall story.

RQ2 asked the frequency of doctors' convergence on and divergence from their patients through their nonverbal behaviors. Giving patients the opportunity to speak more often during a consultation and thus having more control



results in greater patient satisfaction in the medical relationship (Bertakis, Roter, & Putnam, 1991; Li, Desroches, Yum, Koehn, & Deagle, 2007). In only one of the eight scenarios, a physician converged completely, allowing the patient increased time to speak, pause, and interrupt the doctor as the consultation elapsed. In two other episodes, doctors converged in talk time and remained unchanged in pauses and interruptions. Because speech accounted for the majority of time coded overall, the convergence in these episodes arguably has greater impact than the convergence of pauses and interruptions occurring individually in two other episodes, particularly as these events coincided with divergence in talk time during their respective programs. As a result, the divergence found in talk time during three episodes indicates that physicians control consultations as frequently as they permit control to the patient. In spite of this, the balance between convergence and divergence among the episodes echoes the evenness between the means for the series as a whole.

The findings of this study have implications for understanding how doctors and patients communicate in both real and dramatic situations. In fictional television medical programming, realism permits familiarity, but drama reflects public perceptions and expectations (Cohen & Shafer, 2004, p. 211). Producers of dramatic series must consistently reconcile these opposites, and understanding the impact of not only the words spoken from scripts but also the nonverbal behaviors that actors and directors insert through their interpretations can have a lasting impact on both future television and viewer relationship with their personal physicians. The medical community may benefit from these findings by refocusing on patient expectations and the ability to develop training for teaching accommodative behaviors (D'Agostino & Bylund, 2011b).

This study has some limitations worth noting. We chose to focus solely on *GA* as a text, which although not completely unlike other television medical dramas, brings a unique style of character development and patient relations not necessarily represented by other similar series. The findings cannot be generalized; however, we believe the methods can be reused effectively.

Another limitation exists in our use of the NAAS method. We chose to examine only four of the ten NAAS categories. Although our intentions were aimed at measuring elements that did not require visible actions during the program, eliminating these aspects fails to account for the full range of possible nonverbal behaviors that people exhibit. A deeper exploration of the full set of NAAS behaviors in this context should be performed before the conclusions can be definitively accepted. Through the validation conducted by D'Agostino and Bylund (2011a), a reasonable case for face validity can be made; however, additional future studies would test the construct validity for the reduced

Our interpretation method of the results presents a third limitation to the study. No readily available prior methods of interpreting accommodation in a health care context exist; therefore, this necessitated the formulation of a unique scheme. Building from recommendations provided by D'Agostino and Bylund (2011b), we adapted our interpretative basis from the approximation strategy of CAT. Admittedly, the 5% range for determining convergence or divergence is arbitrary; however, we believe that the factor difference calculation will prove useful given greater formal application.

## Conclusion

In spite of the limitations discussed above, the NAAS has potential application for interpreting dramatic portrayals of medical interactions as much as its ability to understand real doctor-patient consultations. The stakes in analyzing medical media certainly do not compare to the literally life and death situations faced in hospitals and physician offices; however, members of the medical profession could benefit from a reaffirmed acknowledgement

of the expectation that fictionalized medical programming should reflect reality as much as reality should be reflected in drama (Vendekieft, 2004, p. 233).

To this end, communication accommodation theory aids in understanding how doctors can provide satisfactory care to patients through the ability to be not only a provider but also an active listener. The NAAS shows potential as a measurement for nonverbal communication accommodation between doctors and patients, and with further application, it appears to apply to mediated conversations, as well. Future research should revisit this study, selecting a larger sample set with careful focus on the conversation flow that occurs through single patient meetings in an episode of not only *GA* but also other medical dramas. Choosing series produced outside of the United States would provide additional cross-cultural data for determining wider applicability. The expansion of the project should also include all categories of the NAAS, and it should test the applicability of the convergence factor measurement.

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## Appendix

### *Grey's Anatomy Episodes Coded*

Season	Episode	Episode Title	Included in Analysis
1	6	If Tomorrow Never Comes	Yes
1	9	Who's Zoomin' Who?	
2	7	Something to Talk About	
2	19	What Have I Done...	Yes
2	20	Band-Aid Covers the Bullet Hole	Yes
3	9	From a Whisper to a Scream	
3	14	Wishin' and Hopin'	Yes
4	6	Kung Fu Fighting	Yes
4	14	The Becoming	
5	8	These Ties That Bind	Yes
6	8	Invest in Love	Yes
6	22	Shiny Happy People	Yes
7	7	That's Me Trying	