Transnational Worlds of Power Journal

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Proliferation of Journalism & Professional Standards Vol. 1. No. 1 2015

Edited by

Ibrahim Saleh

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Preface

Ibrahim Saleh

Success in the 21st century demands knowledge, power- for individuals, organizations, media and politics. This new journal aims to suture the gaps, by offering a map showing the structure of the knowledge-space of a contemporary mediatized political context. The routes beyond traditional disciplines are charted, in part, based on the notions of super concepts and super problems.

There are major implications for the development of media and political systems to ensure that their organizations have the requisite knowledge to meet future challenges. In many instances, radical change in our understanding of political journalism is called for.

For example, politics has played a prominent role in international debates about how the world(s) should be governed. In an ambitious monograph, Ellis and ter Haar contended that values and beliefs have shaped political action into a more hostile setting in myriad different ways. It is argued that we should first attempt to understand political meanings before ascertaining media significance. "Transnational Worlds of Power" here serves as a synthesis of various sources, including ideas, words, spirits, secrets, power, wealth, morality, transformations and histories.

In the current globalized, mediatized politics, one has to readdress how various forms of power are connected and overlap. In many ways, the anticipated benefits of democratization have failed to materialize, giving rise to a renewed quest for mediatized power. Social turbulence has contributed to the diminishment of the old worlds of political power.

Political beliefs and media values are often a reconfiguration of older ideas. In a context where tradition coexists with modernity, mediatized politics play an important role in remembering the past. In this pioneering journal, we attempt to unveil some of the changing world views capable of opening doors to economic and political progress in journalism, which is neither absurd nor unprecedented.

This is the inaugural issue of the new journal: *Transnational Worlds of Power: Proliferation of Journalism & Professional Standards*. The journal is published by Cambridge Scholars. It is the first journal from the

publisher in the area of political journalism in a mediatized world of changing power negotiation and cultures.

The last few years have already seen dramatic changes affecting both journalism and politics. The rise of a range of new digital and networked communication technologies, combined with the stagnation and decline of many traditional media has had a profound impact on political journalism.

The arrival of new digital media has affected the ways in which political actors communicate with the public, with or without journalists as intermediaries. Newspapers that once held political leaders to account are now struggling to survive; broadcasters that once gathered whole nations for the evening news are now fighting for relevance faced with innumerable new competitors on cable and digital television; online-only media, such as blogs and social networking sites, are changing how we communicate on the subject of politics.

Though news media remain central to political processes, the ways in which journalists and politicians interact are changing.

The journal of *Transnational Worlds of Power: Proliferation of Journalism & Professional Standards* is a blind peer-reviewed journal dedicated to the scholarly study of political journalism and newly emerging worlds of power. The journal is interdisciplinary, with an editorial board grounded chiefly on the methodologies of the field of journalism and political studies.

The journal welcomes submissions from across the fields and methodologies that study political journalism, from a local, regional or transnational perspective. This journal provides the perfect opportunity to immerse oneself in the advancements of the fast growing field of political journalism and audience studies, and to get published in a journal that has excellent reach and expectations of a significant impact.

Serving as the editor of a new journal, and editing this first issue, has presented some remarkable challenges, and equally remarkable rewards. In this inaugural issue, there is an excellent collection of research that addresses contemporary issues of political journalism within the current worlds of power.

Benjamin J. Anderson addresses the evolving alternative media in contrast with Bourdieu's field, while Surbhi Dahiya questions editorial freedom in India; João Carlos Correia revisited journalism and framing in an attempt to find a more supportive ethnographic and discursive approach to the news. Eman Mohamed Soliman, Heba Ahmed Morsy, Maha Mohamed El-Wazir, Sara Said Elmaghraby and Yasmine Mohamed Abu El Ela unpack the current social movement's impact in Egypt.

Other issues relevant to the research and methods involved within the

new volatile settings have been studied by Azmat Rasul such as the application of intercoder reliability coefficients in content analysis. Journalists' concepts of freedom of expression and press freedom in Pakistan are carefully assessed by Sadia Jamil.

Fáami Henrique Pereira and Florence Le Cam analyze one of the contemporary oral topics; namely, biographic narratives from web journalists. Marcus Antônio Assis Lima and Rafael Flores Góes Prates examine the production process in alternative media. Finally, Urvi Desai breaks the taboos of poverty pornography.

Unreliably Reliable: Application of the Intercoder Reliability Coefficients in Content Analysis

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Abstract

In this work, the application of various intercoder reliability coefficients in published research is explored. The academic significance thereof lies in the dependence of content analysis research on reliable measurement, which helps researchers assign numerals to the message units. Models specified under the classical test theory suggest that the reliability coefficient is equal to the correlation between two measurements. Nevertheless, it is hard to find accurate, true value in the measurement procedure, as there are numerous sources of error, which pose a grave menace to the accuracy of measurement and lead to bias in research. Thus, reliable measurement is a tremendously important element of content analysis and researchers have applied different procedures to assess intercoder reliability, in order to stave off bias while coding the message units in content analysis. This study briefly describes the assessment of intercoder reliability in content analysis research, and explores the issues surrounding the application of different intercoder reliability techniques by applying content analysis to all articles indexed in Communication Abstracts for the year 2010, so as to examine whether there is a change in the use of reliability coefficients in recent literature. The article also evaluates important guidelines described by different scholars while testing reliability in content analysis under the light of measurement theory.

Key words: Intercoder reliability; content analysis; measurement; agreement indices; Cohen's *kappa*; Krippendorff's *alpha*; communication

Of late, researchers in the social sciences have discussed practical aspects of measurement in content analysis. Significant measurement standards, including reliability, precision and validity, play an important role in determining the quality of a content analysis study. It is important to apply measurement standards in content analysis as measurement helps researchers assign numerals to the message units in a content analysis subject to appropriate rules consistent with the goals of a research project (Harwood and Garry 2003; Neuendorf 2002). According to the classical test theory, all variables on all units have a truth value, which the researcher is trying to investigate. Similarly, McDonald (2013) contends that the reliability coefficient is equal to the correlation between two measurements, which live up to the model defined in classical test theory. Nevertheless, it is extremely difficult to find out the accurate, true value in the measurement process, as there are numerous sources of error. Goodwin (2001) also claims that reliability, which means a degree of consistency in the scores achieved through a measure, should not be considered a static characteristic of an instrument.

The reliability highlights the excellence of test scores in the social sciences and depends on the quality of respondents (Traub and Rowely 1991). The error component, however, is a serious threat to the accuracy of measurement and could potentially lead to bias in research. Thus, reliable measurement is a tremendously important element of content analysis, and researchers have described different procedures to assess intercoder reliability. In content analysis, intercoder reliability is used to ward off the bias of a researcher while coding the message units (Denham, 1999; Krippendorff 1980). It is, therefore, an academic imperative to scrutinize methodological debates on the assessment of intercoder reliability in content analysis and patterns of its usage from a measurement perspective. This article focuses on assorted intercoder reliability assessment procedures, and analyzes the application of these procedures in published research. The central objective of this article is not to run a complex study or delve into statistical merits or shortfalls of various intercoder reliability coefficients. Rather, by simply analyzing the application of intercoder reliability in a small set of published studies, this article briefly surveys the literature and concisely examines the application of the concept of intercoder reliability in content analysis and some of the important issues surrounding the usage of different assessment techniques. The article also evaluates guidelines described by Lombard, Snyder-Duch and Bracken (2002, 2004); Krippendorff and Bock (2009), while employing measurement theory to test reliability in content analysis.

What is intercoder (interrupter) reliability in content analysis?

Intercoder reliability is germane to social science research when the measurement procedures require a subjective judgment by the raters, coders or observers (Tinsley and Weiss 1975, 2000). Even with one coder, scholars such as Martin and Bateson (1993) argue that an assessment of the intercoder reliability is valuable as intracoder (with the in - coder) reliability could help eliminate bias from the study. Neuendorf (2002) defines reliability as defines reliability as "the extent to which a measuring procedure yields the same results on repeated trials" (112). Similarly, Krippendorff (2012) argues that reliability deals with the representative nature of data compared to any specious illustration of data containing errors. Intercoder reliability could be understood as the quality of measurement of different properties of a message in order to reach an optimal level of intercoder agreement (Lombard, Snyder-Duch and Bracken 2004; Tinsley and Weiss 2000).

Intercoder reliability serves to safeguard consistency, accuracy and precision in content analysis. Despite the merits of measuring and reporting reliability in scientific literature, Riffe, Lacy, and Fico (2005) note that many researchers (29 percent) have not reported reliability coefficients in their content analysis studies appearing in *Journalism and Mass Communication Quarterly* between 1971 and 1995. In 2002, Lombard, Snyder-Duch and Bracken (2004) found that 31 percent of content analysis studies had not reported intercoder reliability. Other researchers have also reported similar trends in mass communication research without offering an adequate explanation of why underreporting reliability is so fashionable among researchers in the field of communication (Pasadeos et al. 2011, Riffe and Freitag 1997).

Scholarly discussion of the reasons for the underreporting of intercoder reliability has been limited. Amongst those limited reasons are the conceptual complications associated with different procedures to calculate reliability. Krippendorff and Bock (2009) have described significant conceptual issues that need to be considered while testing reliability in content analysis research. These issues include reproducing coding instructions; appropriate reliability data; an agreed measure with valid reliability interpretations; a minimum acceptable level of reliability; testing the appropriate distinctions (Krippendorff 2012). Correspondingly, Lombard, Snyder-Duch and Bracken (2002) have offered a useful solution to overcome the problem of underreporting of reliability in content analysis research. These conceptual frameworks require a painstaking

analysis, as it is important to ensure agreement in the results generated by various testing instruments, including human coders, to transform messages into usable data. However, several threats to reliability exist, including poorly executed coding schemes, inadequate coder training, coder fatigue, and presence of a rogue coder (Neuendorf 2002). A researcher should take into account these threats before embarking upon a plan to analyze message units. In order to ensure consistency, different coder reliability tests are used to ensure intercoder reliability in content analysis.

It is also worth highlighting the need and academic significance of reporting intercoder reliability in communication research using content analysis as a methodology. Intercoder reliability is the cornerstone of content analysis and its absence renders results invalid, and casts doubt on the authenticity of data and its analysis (Lombard, Snyder-Duch and Bracken 2004). However, it is important to clarify that intercoder reliability alone could not guarantee the validity of research results. Neuendorf (2002) has aptly captured that reliability enjoys a vital position in content analysis as the method strives to record objective features of the message. Beyond doubt, high quality research depends on high levels of agreement among coders, raters, or judges. Assessment of intercoder reliability practically helps the researcher by distributing the cumbersome work of coding among various coders, which relieves the researcher and helps her focus on other significant research problems (Keyton 2006). Estimation of intercoder reliability is becoming increasingly fashionable among marketing researchers and public information campaigners because it helps managers make prudent decisions based on the reliability of data and its interpretation (Neuendorf 2002; Rust and Cooli 1994; Perreault and Leigh 1989). Therefore, analysis of the heuristic debates surrounding measurement of reliability is academically significant in content analysis, and researchers should keep a vigilant eye on the development of various techniques to assess intercoder reliability.

Lombard, Snyder-Duch and Bracken (2004) caution researchers to distinguish between issues concerning the coding of manifest and latent contents of the communication messages. In the same vein, Potter and Levine-Donnerstein (1999) argue that coders are required to provide their subjective exposition of the latent communication content, which would enhance intersubjectivity and sharing of meaning, which would help readers understand the meaning of a message by keeping it in view in all contextual situations. As measurement consists of counting the occurrences of message units in content analysis (Weber 1990), it is important for a researcher to carefully examine the merits and

disadvantages of a coefficient of reliability before choosing one from the few discussed in the following lines.

Inappropriate use of a reliability coefficient may cast doubt upon the entire process of content analysis. A few scholars (Berelson 1952; Hayes and Krippendorff 2007; Krippendorff 2012; Lombard, Snyder-Duch and Bracken 2002; Neuendorf 2002; Riffe and Freitag 1997; Weber 1990) have argued that intercoder reliability directly affects the quality of content analysis research, and that researchers should exercise utmost caution while reporting reliability coefficients. There is a total lack of consensus on the effectiveness of a single measure of intercoder reliability, which exacerbates the intellectual complexity of the issue of measurement in content analysis. Lombard, Snyder-Duch and Bracken (2004) advise researchers to pick at least one index of intercoder reliability before assessing the reliability of their data and that their decision should be based on its properties and assumptions, and the properties of their data, including the level of measurement of each variable for which agreement is to be calculated and the number of coders (6). Therefore, the decision to select a reliability coefficient should be carefully made by considering research objectives and properties of data. A variety of reliability coefficients are used for reporting agreement among coders in content analysis. The popular coefficients include percentage of agreement, Holsti's method, Cohen's Kappa, Scott's Pi, Krippendorff's alpha, Spearman rho, and Pearson r. Each of these reliability coefficients has its advantages and disadvantages; however, only Cohen's Kappa, and Krippendorff's alpha possess the potential of accommodating more than two coders each time (Neuendorf 2002). The following section describes the strengths and limitations of various widely used measures or indices applied by researchers to measure intercoder reliability in content analysis.

Measures of Intercoder Reliability in Content Analysis

Measuring intercoder reliability is essential where two or more coders are employed to categorize communication content, and a subjective assessment by the coders is inevitable while coding latent meaning of the content. The communication content may comprise articles, news, letters, scenes, conversations, words, gestures and different forms of audio-visual presentations. A list of categories of communication content should be exhaustive, and reliability in content analysis seeks to examine the level of agreement among coders by assigning a numerical index to these categories (Lombard, Snyder-Duch and Bracken 2002).

Numerous methods of calculating reliability have been developed in the past five decades, which require a reduction of content into smaller units for reaching coding decisions that must be made independently in a similar set of conditions. Krippendorff (2004) advocates pilot tests to assess intercoder reliability by using a small subsample from the larger sample during the process of coder training, as it will help researchers deal with practical issues while calculating reliability in the final project. Developing a coding sheet and training two or more coders are also integral parts of the process applied in scientific analysis of communication content, through which researchers strive to develop an expertise among coders/raters to reach the maximum number of agreements.

One or more indices of intercoder reliability could be reported in a research study; however, there is little agreement among scholars as to which reliability coefficient is more effective (Stemler 2001). Popping (1988) describes the complexities involved in selecting different reliability indices and claims that 39 different agreement indices" are found in the literature for coding nominal categories excluding many mechanisms associated with ratio and interval data (Krippendorff 2004; Lombard, Snyder-Duch and Bracken 2002). A few popular techniques investigating intercoder reliability coefficients are discussed in the following paragraphs.

Percent Agreement

Percent agreement is one of the oldest, and most widely used, techniques for the assessment of intercoder reliability (Suen and Lee 1985). Hughes and Garrett (1990), for example, assert that reported reliability coefficients in marketing research are percentage agreements. According to Krippendorff (2004), percent agreement deals with the agreement between coders regarding the assessment of precise values associated with a particular variable; in his terms, it is a simple percentage of agreements, calculated through dividing the number of agreements by the total number of measurement, as represented below:

$PA0 = A/n$

Where PA0 means a proportion agreement observed, A reflects the number of agreements among coders and n is the total number of code units. This method has remained popular due to the simplicity of calculations; its values range between 0 (no agreement) to 1 (perfect

agreement). The method, however, fails to account for the by-chance agreements and may allow researchers to artificially inflate reliability by including unquestionably manifest categories (Lombard, Snyder-Duch and Bracken 2002).

Researchers agree that the method may only be suitable to nominal data, as it deals merely with agreements and disagreements and leaves "close" decisions out of the gamut. A standardization of the values of all coders is advised for interval or ratio level variables, which is recommended by Tinsley and Weiss (1975) in order to statistically calibrate the coders before simple agreement procedures could be applied (Neuendorf 2002).

Holsti's Formula

In the tradition of percentage agreement index, Holsti (1969) proposed changes in the calculation of the reliability coefficient. According to Lombard, Snyder-Duch and Bracken (2002),

Inter-reliability is the process where two coders evaluate the same units for a reliability test, however, it [Holsti's Formula] also accounts for situations in which the coders evaluate different units.

By applying Holsti's method, results for a set of variables are calculated instead of a single variable. Neuendorf (2002) criticizes it as a "poor" mechanism that has the potential to eliminate variables having low levels of reliability. Holsti's formula is similar to that of percent agreement and could be represented as follows

$$PA_0 = 2A/ (n_1 + n_2)$$

In the equation above, PA_0 represents the proportion of agreement observed, A is the agreement decisions made by two coders, and n_1 and n_2 are the number of items coded by the coders (Neuendorf 2002).

Scott's Pi (π)

The statistical procedures enshrined in this method rely on joint distribution across two variables in order to overcome problems arising due to chance agreement (Neuendorf 2002). Scott's *Pi* (1955) is considered a conservative index by many researchers that provide true proportions rather than the result of agreement among the coders" (Lombard, Snyder-Duch and Bracken 2002, 591). Scott's *Pi* (1955) assumes that the level of data is nominal and ranges normally between .00 (chance agreement) to 1.00 (complete agreement) with only two coders.

The index tends to neglect the difference in the distribution evaluations across coding categories by the two coders, which may lead to bias and to the formula being unlikely to account for the reduced agreement (Scott 1955; Craig 1981).

Cohen's Kappa (κ)

Cohen (1960) used this statistic to improve *Pi* by considering differences in distribution provided by coders using a multiplication term instead of addition one (Neuendorf 2002). *Kappa*, considered a conservative index by many, is probably the most efficient reliability coefficient dealing with nominal level data (Zwick 1988) and ranges between .00 (chance agreement) to 1.00 (perfect agreement), while values below .00 reflect agreement less than chance (Banerjee et al. 1999). Cohen (1960) was fully cognizant of the weaknesses of his measures, and cases were found when *Kappa* had a value lower than 1.00 despite a perfect agreement between coders (Brennan and Prediger 1981). Cohen's *Kappa* could be used in assorted situations, with multiple coders, and situations when various coders work on different units for coding and subsequent evaluation of reliability. Cohen (1968) had himself introduced changes in his index by introducing a weighted *Kappa* to deal with various types of disagreements. In spite of these improvements, the index is still considered appropriate for dealing with variables measured at nominal levels. The conceptual formula for *Kappa* is given below:

$$Kappa = PA_0 - PA_E/ 1 - PA_E$$

Where PA_0 is observed proportion agreement and PA_E is the expected by-chance proportion agreement. In the recent literature, Cohen's *Kappa* has been paid a great deal of attention due to its capacity to assess reliability in contemporary content analysis, which relies heavily on the reliability of measures used in the analysis.

Krippendorff's alpha

Krippendorff's *alpha* is another popular and widely used reliability index that has many advantages over other measures of reliability in content analysis. For example, this index accommodates several coders, allows variables with all levels of measurement, and accounts for chance agreement (Krippendorff 2004, Lombard, Snyder-Duch and Bracken 2002; Neuendorf 2002). The formula is as follows:

$alpha = 1 - D_0/D_E$

Where D_0 and D_E represent observed and expected disagreements respectively. Due to the tedious nature of the calculations, Neuendorf (2002) maintains that this index has been criticized by many researchers as it is also difficult to calculate reliability for interval and ratio level variables by hand.

Pearson Correlation Coefficient (r)

Contrary to the measures discussed in the preceding lines, the Pearson correlation coefficient could be used for measuring reliability for the variables with ratio or interval level measurement properties. This statistic is helpful in estimating the level of linearity between two sets of interval or ratio level measurements (Neuendorf 2002). The range of r is -1 (perfect negative correlation) to 1 (perfect positive correlation). A few critics argue that the use of r leads to inflated levels of reliability because it estimates covariation but neglects the level of agreement (Banerjee et al. 1999). A few scholars also tend to report r-square in their research, representing it as a proportion of variance accounted for between two coders.

As it is beyond the scope of this study to mention all reliability coefficients used by researchers, I have focused on a few widely used reliability measures in communication literature. However, the debate involved in deciding which reliability coefficient is best is exceedingly time-consuming. Methodologists and researchers working in content analysis research have devoted a considerable amount of time to developing various statistical procedures to measure intercoder reliability; however, the field has yet to reach a consensus on a single reliability coefficient. The critics cast doubt on the validity of results generated through content analysis studies, as the reliability indices are controversial and disagreements rampant. Lombard, Snyder-Duch and Bracken (2002) underscore the need to synthesize the expertise of scholars on this critical issue and point out a consensual opinion that underscore the need to synthesize the expertise of scholars. Also under scrutiny is what could be considered an acceptable level of reliability in content analysis. According to Neuendorf's (2002) rule of thumb, a reliability level of .90 or greater will be adequate and will allow researchers to proceed with further analysis (Banerjee et al. 1999; Ellis 1994; Krippendorff, 2004; Lacy and Riffe, 1996; Riffe, Lacy, and Fico 2005; Singletary 1994). However, 70 is commonly acceptable in exploratory research and .80 will satisfy most

researchers working in the area (Lombard, Snyder-Duch and Bracken 2002).

During the past decades, the majority of researchers have been calculating intercoder reliability by hand, which turns tedious in certain situations, due to the nature of the calculations. A few scholars (Berry and Mielke 1997; Krippendorff 2004; Popping 1988) have written macros and developed programs, which have facilitated the work of contemporary scholars. Since most of these programs are in the developmental phases, it is not possible for researchers interested in content analysis to easily access to this software. It is hoped that efficient automated tools to calculate intercoder reliability will be available to researchers in the near future, which would make the task of estimation of reliability authentic, quick and easy. Due to the absence of reliable pieces of computer software, debates surrounding intercoder reliability in content analysis generate controversies and make the task of researchers and methodologists difficult. The following section highlights important trends emphasizing the utilization of intercoder reliability in content analysis research, and captures important issues related to debates surrounding academic and practical uses of intercoder reliability in recent literature.

Assessment and Reporting of Intercoder Reliability in Content Analysis

The popularity of content analysis could be gauged from the fact that it is one of the most commonly used methods by students in their dissertations, articles and reports in schools of communication across the United States (Wimmer and Dominick 2013). Likewise, after 1978, almost 20 percent of the studies published in *Journalism and Mass Communication Quarterly* applied content analysis as a methodology (Lacy and Riffe, 1996; Riffe, Lacy and Fico 2005). Many researchers argue that investigating and reporting intercoder reliability is not a matter of choice but a necessary condition for reliable and generalisable research. However, many published studies fail to meet this criterion and researchers casually either report, or do not report, intercoder reliability coefficients at all. For example, Riffe, Lacy and Fico (2005) report that almost 29 percent of content analysis studies appearing in *Journalism and Mass Communication Quarterly* from 1991 to 1995 did not pay sufficient attention to discussing reliability coefficients. Perrault and Leigh (1989) found that the most common method of reporting intercoder reliability in marketing research literature was simple percentage agreement, and the

field was devoid of appropriate standards to evaluate reports of intercoder reliability.

Similar studies, such as Hughes and Garrett (1990), Kolbe and Burnett (1991), and Lombard, Snyder-Duch and Bracken (2002), found that researchers adhered to the tradition of insufficient reportage of reliability in marketing and communication research, respectively. These scholars discovered that around one third of the published studies failed to mention intercoder reliability, and authors calculating reliability relied heavily on percent agreement. Criticizing these trends, Kang et al. (1993) surveyed the use of reliability relied heavily on percent agreement. Criticizing these trends, Riffe and Freitag (1997), in their exhaustive analysis of the studies published in *Journalism & Mass Communication Quarterly* between 1971 and 1995, arguing that merely 56 percent of articles focused on reporting reliability measures, although a recording of reliability was a trend in ascendance in the 1990s (72 percent of studies reported intercoder reliability in 1990s, compared to 50 percent in 1970s).

In recent literature, discussion of protocol definitions and procedures is considered a comprehensive reportage of reliability. However, space issues limit the publication of protocols and authors have been advised to provide complete protocols for receiving requests from readers (Riffe, Lacy, and Fico 2005). As Krippendorff and Bock (2009) noted that there are five important issues should be addressed while testing intercoder reliability in content analysis. Reliability, according to him, ensures a purified data, free of external influences or extraneous elements not linked to the process of observation. Coding instructions could improve the level of agreement among coders, as they make the process less tedious and makes it convenient for the researcher to calculate and report reliability. However, Krippendorff (2004, 2012) warns researchers to check the reliability of the coding instructions in order to obtain appropriate reliability data.

Selection of the reliability coefficient is also a critical decision as the measure should be capable of netting the agreement among various content categories. Krippendorff and Bock (2009) suggest that there is a critical decision as the conceivable sources of unreliability. Overly liberal or conservative coefficients affect results in a fashion unintended by the researchers. Therefore, it is a contested but significant question as to what level of agreement is sufficient. Neuendorf's (2002) rule of thumb has been discussed in the preceding lines asking for .90 levels of reliability; however, Krippendorff and Bock (2009) agree with a minimal level of .80. As discussed earlier, rules are relaxed for conservative reliability coefficients and exploratory studies seeking tentative conclusions. All

important distinctions should also be tested, unless researchers find a perfect reliability coefficient. Finally, although reliability and validity are distinctively different, a reliable research contributes towards validating a study as both terms are concerned with truth and trust. Krippendorff and Bock (2009), nonetheless, caution that "reliability cannot guarantee the validity" as errors could be detected in apparently reliable data (356). Thus, discussion in the foregoing paragraphs brings forth trends related to the underreporting of reliability measures, and outlines the issues associated with calculating reliability, which make the process of reporting intercoder reliability tedious, and raise significant questions. In order to examine recent trends, this short study, which is a continuation of the exploratory research tradition initiated by eminent researchers (Kang et al. 1993; Lombard, Snyder-Duch and Bracken 2002; Riffe and Freitag 1997), seeks to answer the following research question:

How frequently do communication researchers adhere to the principle of estimating and reporting intercoder reliability in the published research articles in communication journals of 2010?

Discussion of Method and Results

In this brief study, a content analysis of the use of intercoder reliability coefficients of published articles in 2010 was performed to answer a simple research question, exploring if there was a qualitative change in the use of various intercoder reliability assessment indices. By using the keyword "content analysis" as a search term in the body of full-length published articles, 221 articles were found, which appeared in assorted communication journals during 2010. However, when the research was narrowed down to concentrate on the articles that had used the search term in the body of full-length published articles, 221 articles were found, which appeared in assorted communication journals during 2010. However, when the research was narrowed down to concentrate on the articles that had used the search term "content analysis" in the title of the article, the number decreased significantly, to 20. It was assumed that articles clearly mentioning selection of "content analysis" as a method in the title would scrupulously pay attention to assessing and explicitly reporting reliability measures.

Kang et al (1993) also followed similar procedures when they selected 22 articles appearing in the *Journal of Advertising* from 1981 to 1990. Consequently, all articles elucidating application of content analysis in the title and indexed in the Communication Abstracts for the year 2010, were selected. I followed Lombard, Snyder-Duch, and Bracken (2002) who had

selected articles indexed in the Communication Abstracts for their research project, as the database was considered an authentic source that indexed communication studies appearing in more than 75 journals devoted to communication research. The total selected sample consisted of 20 articles published in different communication journals in 2010.

Different variables were coded for each article, including authorship, medium (TV, radio, advertising, newspaper, online content, etc.), discussion of reliability and content analysis in the abstract, report of reliability in the method section, and a mention of number of coders. Two trained coders were engaged to execute coding. A pilot reliability measure was performed using a random sample (10 percent of total samples) to check the reliability of the coding instrument, finding .95 levels of agreement by using Holsti's formula. In this short research project, this formula was chosen due to its simplicity and ease of use. As per Neuendorf's (2002) rule of thumb, .90 or higher was considered a high level of reliability. Since the focus of research is not comparing various reliability indices, software packages such as PRAM (Program for Reliability Assessment with Multiple-coders) or Krippendorff's Alpha 3.12, were not used.

The results of the intercoder reliability have been presented in Table 1, which reflect a high level (.97) of overall intercoder reliability. All articles (n = 20) selected for this research had reported intercoder reliability, however, 30 percent of articles failed to report the number of coders employed in research. Conversely, this study merely focused on the reporting of the reliability coefficient in the methods section, in order to discover recent trends in estimating and reporting reliability. Previous studies (Kang et al. 1993; Lombard, Snyder-Duch and Bracken 2002; Riffe and Freitag 1997) reported diametrically opposite trends, as in studies investigating reportage of reliability which disclosed that less than one-third of the studies mentioned reliability. It remains to be seen whether procedures involving calculation of reliability were adequately maintained.

Hitherto, the overwhelming majority of authors of studies using content analysis failed to report the selection of a specific index (Riffe, Lacy and Fico 2005). Comparable trends were observed in this research, and only 20 percent of the articles used in this research reported a particular index. Previous research indicated that the most common reliability indices reported in the 1990s and the ensuing decades were percent agreement and Holsti's method. Equally, Hughes and Garrett (1990) found that marketing research heavily relied on percent agreement, and 65 percent of reported reliability was calculated through this method.

Past trends also indicated that Holsti's method had been widely applied, despite its failure to account for the chance agreement and the calculation of an inflated reliability coefficient. The current study also relied on Holsti's formula to calculate the reliability coefficient, as it is a suitable approach for nominal level variables.

Table 1. Intercoder Reliability Using Holsti's Formula (1969)

Variable Name	Reliability (Holsti's Method)
Authorship	1.00
Is method used in the study discussed in the abstract?	.80
Is reliability coefficient mentioned in the abstract?	.80
What medium (TV, Newspaper, Ads etc.) is selected for analysis in the study?	.93
Is reliability discussed in the methods section?	1.00
Does methods section mention number of coders?	.90
Overall Intercoder Reliability	.97

Table 1 indicates that the lowest level of reliability reported by the coders was .80 (acceptable to most researchers in content analysis), while the maximum level was 1.00, which reflects a perfect agreement among the coders. Although, 100 percent (n = 20) articles reported reliability in the sample, most articles did not mention a specific reliability index, number of coders, pilot reliability tests and the coder training protocols. Table 1 shows that researchers still do not pay attention to reporting reliability coefficients in the abstracts of their works. Often incomplete, ambiguous and inadequate information is provided while maintaining reliability (Lombard, Snyder-Duch and Bracken 2002). Similar trends

were found by this study despite the fact that all articles devoted at least a couple of sentences to report reliability.

Concluding Thoughts

It has become quite fashionable in communication research to utilize content analysis as a methodology; but what is not equally fashionable is the reporting of intercoder reliability in published articles in various journals. Previous research (Kang et al. 1993; Lombard, Snyder-Duch and Bracken 2002; Riffe and Freitag 1997) disclosed that researchers paid minimal attention to explicating procedures involved in the calculation of intercoder reliability. Nevertheless, communication scholars such as Riffe, Lacy and Fico (2005) indicated that discussion of reliability in the method sections had markedly increased in the 1990s. This study also confirms that published research articles in 2010 were scrupulous in reporting reliability; however, relevant procedures were not adequately maintained. Likewise, researchers paid little, or no, attention to the discussion of specific reliability coefficient used in their inquiry.

The chief causes are lack of consensus on the role of reliability coefficients in content analysis resulting in complex debates, unavailability of efficient pieces of software to calculate reliability, and the evolutionary nature of communication inquiry. Another argument that requires meticulous analysis is the use of the term "intercoder reliability" in content analysis. Communication researchers are using the concept to merely calculate agreement among different coders.

Kolbe and Burnett (1991) have rightly pointed out that "intercoder reliability" should be supplanted with "intercoder agreement," as the term "agreement" properly encapsulates the idea behind these calculations in content analysis. Popping (1988) had also changed the nomenclature and used the word "agreement indices" instead of reliability indices. Unlike other established social sciences, the concept of intercoder reliability is not being used in content analysis to capture reliability, which is the squared correlation between the two measurements in social science inquiry. Content analysts should address this potential flaw in order to improve the "true" reliability of their research.

This study also has several potential limitations. Since the central objective of the study has been to develop a discussion on the importance of intercoder reliability in content analysis and a brief introduction to assorted reliability assessment indices, the small data set used in this study and the simple analysis does not portray a comprehensive picture. These results are not generalisable due to the brief period from which articles

were selected (one year), and future researchers should replicate some of the studies published in recent years (Lombard, Snyder-Duch and Bracken 2002; Riffe and Freitag 1997). This area needs a continued research effort as new software capable of calculating intercoder reliability in complex data sets have been developed. As discussed earlier, researchers should continue to debate the effectiveness and use of various reliability assessment procedures by avoiding any confusion that may arise because of these discussions. Academic relevance and significance of content analysis have been significantly enhanced in recent years, due to the availability of multiple media outlets (especially social media) that generate a tremendous amount of mediated content. This situation requires an efficient use of content analysis in order to understand the flow and meaning of media content, which will be lacking reliability and authenticity should efficient intercoder reliability techniques not be applied. This work has been an effort to trigger meaningful debates on this issue, and I hope that future researchers will keenly observe and academically analyze the use of intercoder reliability trends in content analysis research.

References

Banerjee, Mousumi, Michelle Capozzoli, Laura McSweeney, and Debajyoti Sinha. 1999. Beyond kappa: A review of interrater agreement measures. *Canadian Journal of Statistics* 27 (1): 3-23.

Bennett, Edward M., R. Alpert, and AC Goldstein. 1954. Communications through limited-response questioning. *Public Opinion Quarterly* 18 (3): 303-8.

Berelson, Bernard. 1952. Content analysis in communication research. Glencoe, IL: Free Press.

Berry, Kenneth J., and Paul W. Mielke. 1997. Measuring the joint agreement between multiple raters and a standard. *Educational and Psychological Measurement* 57: 527-30.

Brennan, Robert L., and Dale J. Prediger. 1981. Coefficient kappa: Some uses, misuses, and alternatives. *Educational and Psychological Measurement* 41 (3): 687-99.

Cohen, Jacob. 1960. A coefficient of agreement for nominal scales. *Educational and Psychological Measurement*, 20: 37-ical

Cohen, Jacob. 1968. Weighted kappa: Nominal scale agreement provision for scaled disagreement or partial credit. *Psychological Bulletin* 70 (4): 213-18.

Craig, Robert T. (1981). Generalization of Scott's index of intercoder agreement. *Public Opinion Quarterly* 45 (2): 260-64.

Denham, Bryan. 1999. Analyzing media messages: Using quantitative content analysis in research. *Journalism & Mass Communication Educator* 53 (4): 94-108.

Ellis, Lee. 1994. *Research methods in the social sciences.* Madison, WI: Brown & Benchmark.

Goodwin, Laura D. 2001. Interrater agreement and reliability. *Measurement in Physical Education and Exercise Science* 5 (1): 13-34.

Harwood, Tracy, and Tony Garry. 2003. An overview of content analysis. *The Marketing Review* 3 (4): 479-98.

Hayes, Andrew F., and Klaus Krippendorff. 2007. Answering the call for a standard reliability measure for coding data. *Communication Methods and Measures* 1 (1): 77-89.

Holsti, Ole R. 1969. Content analysis for the social sciences and humanities. Reading, MA: Addison-Wesley.

Hughes, Marie Adele, and Dennis E. Garrett. 1990. Intercoder reliability estimation approaches in marketing: A generalizability theory framework for quantitative data. *Journal of Marketing Research* 27 (2): 185-95.

Kang, Namjun, Ali Kara, HA Laskey, and FB Seaton. 1993. A SAS macro for calculating intercoder agreement in content analysis. *Journal of Advertising* 22 (2): 17-28.

Keyton, Joann. 2006. *Communication research: Asking questions, finding answers.* New York: McGraw-Hill.

Kolbe, Richard H., and Melissa S. Burnett. 1991. Content-analysis research: An examination of applications with directives for improving research reliability and objectivity. *Journal of Consumer Research* 18 (2): 243-50.

Krippendorff, Klaus. 2012. *Content analysis: An introduction to its methodology*. New York: Sage.

—. 2004. Reliability in content analysis. *Human Communication Research* 30 (3): 411-33.

—. 1980.3*Content analysis: an introduction to its methodology*. Newbury Park, CA: Sage.

Krippendorff, Klaus, and Mary Angela Bock. 2009. *The content analysis reader*. London: Sage.

Lacy, Stephen, and Daniel Riffe. 1996. Sampling error and selecting intercoder reliability samples for nominal content categories. *Journalism & Mass Communication Quarterly* 73 (4): 963-73.

Lombard, Mathew, Jennifer Snyder-Duch, and Cheryl Bracken. 2004. Correction. *Human Communication Research*, 29: 469-72.

—. 2002. Content analysis in mass communication: Assessment and reporting of intercoder reliability. *Human Communication Research* 28 (4): 587-604.

Martin, Paul, and Paul P. Bateson. 1993. *Measuring behaviour: an introductory guide*. New York: Cambridge University Press.

McDonald, Roderick P. 2013. *Test theory: A unified* treatment. New York: Psychology Press.

Neuendorf, Kimberly A. 2002. *The content analysis guidebook*. Thousand Oaks, CA: Sage.

Pasadeos, Yorgo, Margot O. Lamme, Karla Gower, and Song Tian. 2011. A methodological evaluation of public relations research. *Public Relations Review* 37 (2): 163-65.

Perreault, W. D., and Laurence E. Leigh. 1989. Reliability of nominal data based on qualitative judgments. *Journal of Marketing Research* 26 (2): 135-48.

Popping, Roel. 1988. On agreement indices for nominal data. In *Sociometric research: Volume 1, data collection and scaling*, ed. W. E. Saris, and I. Gallhofer, 90-105. New York: St. Martin's Press.

Potter, W. James, and Deborah Levine-Donnerstein. 1999. Rethinking validity and reliability in content analysis. *Journal of Applied Communication Research* 27 (3): 258-84.

Riffe, Daniel, and Alan Freitag. 1997. A content analysis of content analyses: Twenty-five years of journalism quarterly. *Journalism & Mass Communication Quarterly* 74 (3): 515-24.

Riffe, Daniel, Stephen Lacy, and Frederick G. Fico. 2005. *Analyzing media messages: Using quantitative content analysis in research*. Mahwah, NJ: Lawrence Erlbaum.

Rust, Roland T., and Bruce Cooli. 1994. Reliability measures for qualitative data: Theory and implications. *Journal of Marketing Research* 31 (1): 1-14.

Scott, William A. 1955. Reliability of content analysis: The case of nominal scale coding. *Public Opinion Quarterly* 19: 321-25.

Singletary, Michael. 1994. *Mass communication research: Contemporary methods and applications*. New York: Longman.

Stemler, Steve. 2001. An overview of content analysis. *Practical Assessment, Research & Evaluation* 7 (17): 137-46.

Suen, Hoi K., and Patrick S Lee. 1985. Effects of the use of percentage agreement on behavioral observation reliabilities: A reassessment. *Journal of Psychopathology and Behavioral Assessment* 7 (3): 221-34.

Tinsley, Howard E., and David J. Weiss. 2000. Interrater reliability and agreement. In *Handbook of applied multivariate statistics and mathematical modeling*, ed. T. Howard and S. D. Brown, 95-124. San Diego, CA: Academic Press.

Tinsley, Howard E., and David J. Weiss. 1975. Interrater reliability and agreement of subjective judgments. *Journal of Counseling Psychology* 22 (4): 358-76.

Traub, Ross E., and Glenn L. Rowley. (1991). Understanding reliability. *Educational Measurement: Issues and practice* 10 (1): 37-45.

Weber, Robert. 1990. *Basic content analysis.* New York: Sage

Wimmer, Roger, and Joseph Dominick. 2013. *Mass media research*. New York: Cengage Learning.

Zwick, Rebecca. 1988. Another look at interrater agreement. *Psychological Bulletin* 103 (3): 374-86.

POVERTY PORNOGRAPHY: CONSUMPTION OF THE *POOR INDIA* BY WESTERN IMAGINATIONS

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Abstract

In the urban imagination, the idea of the city has evolved with time. Many of these spaces have come to signify and symbolize different aspects of city life. From what was earlier seen as the alternative of rural areas, or one that depicted the growth, potential and measure of a nation's development, a city has also come to denote the limpness, fragility and poverty of a nation's underbelly. In contemporary urban studies, the burgeoning metropolises of the Global South have increasingly become the focus of intense interest, the term "megacity" becoming shorthand for the human condition of the Global South. It is in these discussions that we renegotiate the meaning of the city space, its use by different people and their mobilities and accessibility to the rest of the city. In the story of these subaltern spaces, it is the ubiquitous slum that enters the discussion prominently. The construction of ideas around these subaltern spaces, indeed around the slum, have in the past and continue to, be painted as different pictures, often through an elite eye, with limited understanding of the realities of these areas. This paper contests the prevalent discussion surrounding the megacity of the Global South, and critiques the consumption of poverty through mainstream Western understandings of Indian poverty and popular media by bringing forward a new meaning to the terms megacity and slums, taking into account the enterprise, business and skill that underlies many of these slumdog stories.

Keywords: megacity, slums, western representation, popular media.