

Cyberbullying: A Research-based Content Analysis of the Psychological Literature

Chris Piotrowski, Research Consultant, University of West Florida, Pensacola, FL 32514

ABSTRACT

Research on the topic of cyber-bullying has proliferated over the past decade, particularly on its impact on children through adolescents. Thus, it would be of interest to examine the scope and extent of research interest on the topic in scholarly publications. This paper reports on a reference citation analysis of the database PsycINFO, using the term cyberbullying in a keyword search. In rank order, the major foci of the research involved the issues of intervention or treatment, profile of offenders, comparisons to traditional bullying, legal implications, risk factors, social dynamics, gender, prevalence, and measurement issues. In addition, the following journals were the top publication outlets for cyber-bullying research: *Journal of Psychology*, *CyberPsychology & Behavior*, *Journal of Adolescent Health*, *Journal of School Violence*, *Psychology in the Schools*, *School Psychology International*, and *Preventing School Failure*.

Introduction

Mobile communications are undoubtedly a ubiquitous feature of modern life, particularly since the advent of the cell phone (Goggin, 2006; Hamill & Lasen, 2005; Levinson, 2004). Despite advances in communications technology, cyber-crimes seem to be increasing. Cyber-bullying, a component of Cyber-abuse, encompasses online abusive interpersonal behaviors that are overly aggressive in nature (Kowalski, Limber, & Agatston, 2008). Moreover, the intent is to threaten, harass, embarrass, or socially ostracize a specific, intended victim. Recent research shows that the prevalence of cyber-abuse of children and youth is growing dramatically in the U.S. (Mark & Ratliffe, 2011), with detrimental effects on both psychological and academic functioning (see Mishna, Cook, Saini, Wu, & MacFadden, 2011, for a review). Over the past decade, there has been increased attention devoted to the onerous issue of cyber-bullying (Chibbaro, 2007; Li, 2010). At the same time, much of the literature on cyberbullying has focused on the impact, abuse, and victimization of school-aged children (Jimerson, Swearer, & Espelage, 2009; Mason, 2008).

Students who are cyber-bullied have reported negative emotional responses such as sadness, fear, anxiety, and humiliation. One result of such affective states is the inability to concentrate and study, thus directly impacting grades and social relationships in children (Beran & Li, 2007). Previous research has indicated that students who are cyber-aggressive tend to be identified as socially inept, showing problems at home and with school authority. Moreover, these abusive students also exhibit substance abuse patterns and delinquency (Hoff & Mitchell, 2009). For these reasons, cyberbullying has evolved as a major source of concern for parents and professionals, particularly today's educators.

The area of the behavioral and social sciences is a discipline involved in studying cyberbullying as a specific investigatory topic in research studies. The database PsycINFO indexes a large number of journals in the field of education. For this reason, the current research design utilized this major database to survey research trends in the literature on the specific topic of cyberbullying. In addition, previous studies have illustrated the benefits of research designs that involve trend analysis approaches

(Garfield, 1979; Piotrowski & Gallant, 2009; Reynolds & Sundberg, 1976). The present study aims to obtain an overview of the scope and research emphasis on the issue of cyberbullying. To that end, a reference citation analysis of published literature was performed, using a keyword search strategy (Piotrowski & Perdue, 1986).

Method

Despite the fact that content analysis of the research literature have their limitations, recent studies in the social sciences field show that this qualitative research methodology has both practical and investigatory value (Krippendorff, 2004; Patton, 2002; Weber, 1990). Indeed, content analysis has been successfully applied in studies of instruction and curriculum (e.g., Houck & Boyle, 2010).

Measuring Trends in Research

The examination of research trends in the literature has served as an informative exercise in addressing the popularity or shifts in attention on a host of topics of interest to both practitioners and researchers across various disciplines (Denzin & Lincoln, 1998). Moreover, analyses of patterns and topical emphasis in research have recently been reported in applied fields (e.g., Furrer, Thomas, & Goussevskaia, 2008). Some issues that have garnered much attention in analyses of the literature include the popularity of major theories or esteemed theorists (Griggs & Proctor, 2002; Myers, 1970), schools of influence, conceptual or prediction models, statistical techniques in data analysis, and author citation searches. In another area, investigators have studied trends in the status or use of tests or measures as research instruments (Piotrowski, 1995; Polyson, Peterson, & Marshall, 1986; Reynolds & Sundberg, 1976).

Despite the drawbacks in the reporting of reference/citation data analyses (Herbert, 2004; MacRoberts & MacRoberts, 1989; Seglen, 1997), findings of these types of studies can inform the educator or researcher on reviews of a select bibliographic body of knowledge, as well as identification of potential research outlets for publication. The current findings should be of interest to three constituencies: 1) Academic researchers and faculty who have an inherent interest in scholarly work on contemporary educational issues (Kaya, Webb, & Weber, 2005); 2) Counseling staff in educational settings (Piotrowski, Perdue, & Armstrong, 2005); and 3) School administrators who have the unenviable task of handling aberrant behaviors that have legal implications for both the student and the school system.

Online Search Strategy

A keyword search of the term *cyberbullying* was performed (see Brand, 1979; Piotrowski & Perdue, 1986). The search was conducted on October 30, 2011. This procedure yielded 157 reference citations to empirical studies, commentaries, books/chapters, and dissertation summaries. Based on the abstract of the noted reference, the author tagged the reference with a descriptor that best represented that main topical focus of the research. A frequency tally, across the main categories, was maintained until all 157 references were scored. These scores were then tabulated for frequency counts on each descriptive category.

Results and Discussion

The current bibliographic citation analysis indicates that a sizeable minority (40%) of the literature on the topic of cyberbullying is general in scope; for example, a commentary on a former article or a book review. However, there are several major aspects of this topic that have received much research

attention; i.e., examining the characteristics of abusers, comparing traditional vs. cyber-bullying, legal concerns, and the role of school personnel in controlling pupils' behaviors. As noted in Table 1, there seems to be investigatory efforts to determine the most robust approaches or interventions in either abating or mitigating the factors associated with cyberbullying. At the same time, several factors (that appear to play a key role in the occurrence and maintenance of this problematic, enigmatic behavior) seem to be largely ignored by researchers, such as gender and age factors. Moreover, there is a dearth of studies with a focus on family issues and socio-economic factors. Overall, research studies seem to provide equal emphasis on the level of educational setting. That is, researchers have focused across all three major school levels: middle school, high school, and college.

One area that has been largely ignored is the elementary level, where there is the potential to promote preventative measures during the early developmental years (see Sabella, 2009). For example, both teachers and school personnel could incorporate some seminal training on the proper use of mobile tech devices for young students, both at school and elsewhere. Violations of school standards could be referred to school counselors (Bauman, 2008; Hoff & Mitchell, 2009). For older students, several authors have suggested a host of intervention strategies that include web-based resources and lesson plans/activities which serve a preventative function and provide both teachers and their students a realistic framework to cope with cyberbullying (Couvillon & Llieva, 2011; Sabella, 2009). Furthermore, it seems that educators are challenged by the moral and legal implications of cyberbullying (Patchin, 2011; Shariff, 2004). The major drawback is that current laws are rather ambiguous, with little consensus across school districts. Moreover, civil rights issues restrict the implementation of interventions promoted by both educators and administrators. Perhaps, initiatives to promulgate Best Practices at the national level would not only address the concerns of parents, teachers, and school administrators, would also provide a legal framework for local school boards.

The current analysis also provided data based on a sidebar database function of the search results, regarding the most frequently cited journals on the topic of cyberbullying. Table 2 shows the rank order of the 'Top 10' scholarly publication outlets in this area. By comparison, the database ProQuest-Education has indexed only a limited number (n=42) of scholarly articles on cyberbullying, across a wide variety of educational journals. Only two journals (Preventing School Failure, Computers in the Schools) had more than one reference on the topic of cyberbullying.

Finally, although there have been concerns about the use of citation analysis, the current study illustrates that examining research trends in the literature can be a functional tool to obtain a systematic view of the major topical areas of research emphasis in the field of education. The findings present an overview of the scope of research on an urgent contemporary topic of concern to parents, educators, and counselors.

Table 1. Rank order of the most frequently researched topics in cyberbullying research (N=157)

Topical focus	Frequency/Percent	
Interventions/treatment	22	(14%)
Abuser profile	11	(7%)
Traditional bullying issues	10	(6%)
Legal implications	9	(6%)
Impact of school personnel	9	(6%)
Social dynamics	5	(3%)
Risk factors	5	(3%)
Measurement issues	5	(3%)
Prevalence statistics	5	(3%)
Social networking factors	4	(2.5%)
Family issues	4	(2.5%)
Special education students	3	(2%)
Peer influence	3	(2%)
Suicide	3	(2%)
Other general or idiosyncratic topics (e.g., rural schools and book reviews)	62	(40%)

Table 2. In rank order, the “Top 10” publication outlets for research on cyberbullying

Journal	Number of Articles
Journal of Psychology	14
Australian Journal of Guidance & Counseling	8
CyberPsychology & Behavior	7
Journal of Adolescent Health	7
Computers in Human Behavior	5
PsycCRITIQUES	4
Journal of School Violence	3
Psychology in the Schools	3
School Psychology International	3
Behavioral Psychology	2

References

- Bauman, S. (2008). The role of elementary school counselors in reducing school bullying. *Elementary School Journal*, 108(5), 362-375.
- Beran, T., & Li, Q. (2007). The relationship between cyber bullying and school bullying. *Journal of Student Well-being*, 1, 15-33.
- Brand, A. (1979). Searching multiple indexes and databases in the behavioral sciences: Which and how many? *Behavioral & Social Sciences Librarian*, 1(2), 105-112.
- Chibbaro, J. S. (2007). School counselors and the cyber bully: Interventions and implications. *Professional School Counseling*, 11, 65-68.
- Couvillon, M.A., & Llieva, V. (2011). Recommended practices: A review of schoolwide preventative programs and strategies on cyberbullying. *Preventing School Failure*, 55(20), 96-103.
- Denzin, N.K., & Lincoln, Y.S. (Eds.). (1998). *Collecting and interpreting qualitative materials*. Thousand Oaks, CA: Sage.
- Furrer, O., Thomas, H., & Goussevskaia, A. (2008). The structure and evolution of the strategic management field: A content analysis of 26 years of strategic management research. *International Journal of Management Reviews*, 10(1), 1-23.

- Garfield, E. (1979). *Citation indexing: Its theory and application in science, technology, and humanities*. New York: Wiley.
- Goggin, G. (2006). *Cell phone culture: Mobile technology in everyday life*. New York: Routledge.
- Griggs, R. A., & Proctor, D. (2002). A citation analysis of who's who in introductory textbooks. *Teaching of Psychology*, 29(3), 203-206.
- Hamill, L., & Lasen, A. (2005). *Mobile world: Past, present, and future*. New York: Springer.
- Herbert, R. (2004). "Highly cited," highly controversial. *Association for Psychological Science Observer*, 17(3), 31-40.
- Hoff, D.L., & Mitchell, S.N. (2009). Cyberbullying: Causes, effects, and remedies. *Journal of Educational Administration*, 47(5), 652-661.
- Houck, M., & Boyle, J. (2010). A content analysis of fingerprint literature for educational curricula. *Science & Justice*, 50(3), 123-131.
- Jimerson, S.R., Swearer, S.M., & Espelage, D.L. (2009). *Handbook of bullying in schools*. New York: Routledge.
- Kaya, N., Webb, J. D., & Weber, M. J. (2005). Faculty scholarly goals: Relationships between institutional, departmental, and individual's emphasis. *Education*, 125(3), 446-453.
- Kowalski, R.M., Limber, S., & Agatston, P. (2008). *Cyber bullying*. Malden, MA: Blackwell Publishing.
- Krippendorff, K. (2004). *Content analysis: An introduction to its methodology* (2nd ed.). Thousand Oaks, CA: Sage.
- Levinson, P. (2004). *Cellphone: The story of the world's most mobile medium & how it has transformed everything!* New York: Palgrave Macmillan.
- Li, Q. (2010). Cyber bullying in high schools. *Journal of Aggression, Maltreatment, & Trauma*, 19(4), 372-392.
- MacRoberts, M. H., & MacRoberts, B. R. (1989). Problems of citation analysis: A critical review. *Journal of the American Society for Information Science*, 40, 342-349.
- Mark, L., & Ratliffe, K.T. (2011). Cyber worlds: New playground for bullying. *Computers in the Schools*, 28(2), 92-95.
- Mason, K. (2008). Cyber bullying: A preliminary assessment for school personnel. *Psychology in the Schools*, 45(4), 323-348.
- Mishna, F., Cook, C., Saini, M., Wu, M., & MacFadden, R. (2011). Interventions to prevent and reduce cyber abuse of youth: A systematic review. *Research on Social Work Practice*, 21(1), 5-14.
- Myers, C. R. (1970). Journal citations and scientific eminence in contemporary psychology. *American Psychologist*, 25, 1041-1048.

- Patchin, J.W. (2011). Cyberbullying: A review of the legal issues facing educators. *Preventing School Failure*, 55(2), 71-74.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods*. Thousand Oaks, CA: Sage.
- Piotrowski, C. (1995). A review of the clinical and research use of the Bender-Gestalt Test. *Perceptual and Motor Skills*, 81, 1272-1274.
- Piotrowski, C., & Gallant, N. (2009). The child sexual abuse accommodation syndrome: A research citation analysis. *Psychology & Education: An Interdisciplinary Journal*, 46(1), 34-35.
- Piotrowski, C., & Perdue, B. (1986). Online literature retrieval: An alternative research strategy. *Teaching of Psychology*, 13, 153-154.
- Piotrowski, C., & Perdue, B., & Armstrong, T. (2005). Scholarly online database use in higher education. *Education*, 125, 443-445.
- Polyson, J., Peterson, R., & Marshall, C. (1986). MMPI and Rorschach: Three decades of research. *Professional Psychology: Research and Practice*, 17, 476-478.
- Reynolds, W.M., & Sundberg, N.D. (1976). Recent research trends in testing. *Journal of Personality Assessment*, 40, 228-231.
- Sabella, R.A. (2009). Cyberbullying: Who, what, where, why, and what now? *Counseling and Human Development*, 41(8), 1-15.
- Seglen, P. (1997). Why the impact factor of journals should not be used for evaluating research. *British Medical Journal*, 314, 498-502.
- Shariff, S. (2004). Keeping schools out of court: Legally defensible models of leadership. *Educational Forum*, 68(3), 222-234.
- Weber, R. P. (1990). *Basic content analysis*. Thousand Oaks, CA: Sage.