Li, Q. (2006). Cyberbullying in Schools: A Research of Gender Differences. *School Psychology International, 27*(2), 157-170. doi: 10.1177/0143034306064547

**Theoretical Perspective**

*Critique the author’s conceptual framework.*

Li builds a logical conceptual framework for addressing gender differences in cyberbullying. The author begins by citing prior research that establishes traditional bullying as a pervasive and longstanding problem for adolescents in school. She then discusses cyberbullying as the next evolution of bullying, resulting from the growing popularity of social communication technologies among middle school and junior high students. Li goes on to cite research that reveals gender patterns within incidences of traditional bullying and questions whether these patterns exist within the realm of cyberbullying as well. While the author could have chosen to focus on other confounding issues unique to cyberbullying, such as anonymous interactions or the facilitation of a potentially problematic “group mentality”, these foci would only help to define cyberbullying in isolation. Li’s research focus instead examines possible commonalities, namely gender influence, between traditional bullying and cyberbullying in cyberspace.

*Comment on the need for this study and its importance.*

The fact that no prior research has yet explored the role of gender in cyberbullying creates a reasonable argument for the need for this study. The importance of the study also seems apparent, as parents and educators seek to understand and combat the comparatively new issue of technology-based bullying and reduce the negative impact on our youth. However, Li states that the research developed in this study is intended to support the appropriate use of technology in schools and, as a result, develop appropriate preventive and intervention strategies to ensure the safety of all students. I question the potential policy influence of a descriptive (non-causal) study aimed at uncovering possible gender trends. How can the data generated by Li’s study translate into a better understanding of the nature of cyberbullying in such a way that educators can better facilitate appropriate technology use? Li’s statement that victims of cyberbullying may be at risk for experiencing poor psychosocial adjustment underscores a pressing need for intervention informed by further research. However, the author’s stated applications seem to over-reach the limited focus of her inquiry.

*How effectively does the author tie the study to relevant theory and prior research?*

The author extensively cites prior research focused on violence, peer bullying, harassment through electronic communication, the impact of technology on social interactions, and the correlation between gender and traditional bullying. All of these citations situate Li’s research within relevant theory. However, it was surprising that the author didn’t also discuss prominent theories of aggressive behavior, notably Brezina, Piquero, and Mazerolle’s 2001 publication in the Journal of Research in Crime & Delinquency, which indicates that student-to-student conflict is partly a function of the level of anger in the student population. This omission may have been intentional, given the study’s focus on defining existing gender patterns related to cyberbullying. However, it seems that Li’s stated purpose, to investigate the nature and extent of the adolescent experience of cyberbullying, would have necessitated citing prior research that specifically addresses the nature of aggressive behaviors themselves.

*Evaluate the clarity and appropriateness of the research questions or hypotheses.*

The research questions were clear and concise, logically flowing from the prior discussion and appropriately articulating the point of inquiry for the study. However, I question why the author chose to shift the focus from the comparison between gender and bullying to the broader topic of male and female perceptions of school climate. While this inquiry certainly informs the larger question, there is no research base establishing interplay between gender-based perceptions of school climate and resulting acts of aggression. Therefore, the focus of the study is effectively split, studying the simultaneous comparison of multiple variables, which complicates further analysis in regards to causality.

**Research Design and Analysis**

*Critique the appropriateness and adequacy of the study’s design in relation to the research questions or hypotheses.*

Li’s research focuses on the examination of possible gender patterns within cyberbullying, with a secondary focus related to gender-specific perceptions of school climate. While the first research question is clear and directly tied to the author’s primary focus, the remaining two questions are vague and fail to explicitly address the stated secondary focus. Specifically, these questions inquire about gender-specific perceptions concerning: adult prevention of cyberbullying and informing adults about cyberbullying occurrences. Perhaps Li’s secondary focus may have been better framed as “gender patterns related to perceptions of adult involvement and intervention”. Also, Li offers no theoretical explanation, nor does she cite existing research to support investigation of these factors as they relate to either traditional or cyberbullying.

*Critique the adequacy of the study’s sampling methods (e.g., choice of participants) and their implications for generalizability.*

Li reports that the subjects for this study were randomly selected from three middle schools in a large city in Canada. However, important selection details were noticeably absent; specifically, although the author specifies that the participating schools were randomly selected, she does not specify how the questionnaire was presented to students. In this age group, students may feel compelled to participate if the choice to abstain is not clearly presented and explained as an acceptable option. This could unintentionally affect the intended random sampling. Li also neglects to mention if any questionnaires were excluded, which could alter the study’s findings. Further, over 75% of participants were white students and only 1.2% of respondents report below-average grades. The generalizability of the study is therefore limited to predominantly white populations of students in grades 7-9 with average to above average grades.

*Critique the adequacy of the study’s procedures and materials (e.g., interventions, interview protocols, data collection procedures).*

The study’s procedures were not adequately described in this study and therefore cannot be appropriately evaluated. One issue of concern is student perceptions of anonymity. Since Li did not specify whether students were assured that their answers were confidential, and discussions surrounding bullying evoke strong emotions such as embarrassment and even fear of physical violence, the honesty of responses could vary based on individual sensitivity to privacy issues. I also question Li’s use of a survey that was adapted from her own previous research, since research questions two and three fail to specifically address her stated secondary research focus. Lastly, the author’s survey contained 26 items, yet she only reported on the 15 items that were analyzed. Li’s reasoning behind this apparent exclusion of 11 items was, again, noticeably missing. These issues, in combination, present serious concerns regarding the adequacy of the study’s procedures and protocols.

*Critique the appropriateness and quality (e.g., reliability, validity) of the measures used.*

Li neglects to discuss the reliability and validity properties of the measurements used, complicating reader evaluation of these factors. This omission presents a potentially crucial negative impact on the study’s contribution to the intended body of research by limiting interpretation. For example, if there is poor test-retest reliability, a future study utilizing the same questions could produce very different participant responses. Also, the author did not discuss possible variation in student interpretation of the questions. Specifically, the questionnaire repeatedly uses the words “bullied” and “cyberbullied” without providing definitions for these terms. While one student may consider an unkind comment over text to be bullying, another may characterize bullying as threats of physical violence. This disparity has the potential to produce unreliable data.

*Critique the adequacy of the study’s data analyses. For example: Have important statistical assumptions been met? Are the analyses appropriate for the study’s design? Are the analyses appropriate for the data collected?*

This study was designed to yield both descriptive and comparative data, and Li appropriately utilized both descriptive and inferential statistics in her analysis. The descriptive statistics adequately quantified factors such as ethnicity breakdown, gender, academic achievement, and personal experience with bullying. Chi-squared tests are commonly employed to determine if two categorical variables are related. Li’s use of Chi-squared is therefore a logical and appropriate test to compare gender differences.

**Interpretation and Implications of Results**

*Critique the author’s discussion of the methodological and/or conceptual limitations of the results.*

The author’s discussion focused almost exclusively on results-based comparisons to prior research, with little inclusion of the limitations of results. In fact, the only limitations Li mentions are generalizability restrictions resulting from the study’s geographical positioning in an urban city and the specific age group being studied. I feel that these are functionally generic limitations that apply to almost all research studies and do not demonstrate a critical analysis of methodological or conceptual limitations. Further, the few questions that the author did address revealed what I consider to be faulted reasoning and conclusions. For example, Li mentions being puzzled by the “much higher percentage of bully victims as compared to previous research results” (p. 8). She initially reasons that students’ socio-economic status may have contributed to this discrepancy. However, she then seeks to negate this by stating that about half of the students were from the school where there are mainly middle class residents. This explanation is insufficient to reject SES as a predictive factor.

*How consistent and comprehensive are the author’s conclusions with the reported results?*

The reported results directly addressed the author’s stated research questions, and the author aligned her conclusions with these results, although not consistently or comprehensively. For example, Li concluded that “cyberbullying is becoming an increasingly critical problem for schools and the whole society” (p. 10). She supports this conclusion by noting the “astonishing high percent of adolescents who had experienced cyberbully tactics observed in this study”. I feel that Li over-extended the applicability of results to “the whole society” by generalizing reported results beyond their intended scope. Also, conclusion three states that gender plays a significant role in cyberbullying. Again, Li over-reaches by implying causation. The final conclusions are actually more suggestions for future research, proposing that the early adolescent period merits more attention and that focusing more attention on bystanders has the potential power to prevent a significant amount of cyberbullying.

*How well did the author relate the results to the study’s theoretical base?*

Li’s appropriately relates her findings to the study’s theoretical base as well as relevant prior research, although not consistently. For example, the author first appropriately notes that gender patterns, previously identified in studies related to traditional bullying, are also found in instances of cyberbullying. Also, Li found that males were more likely to be bullies and cyberbullies than their female counterparts, again meshing with prior research which shows females are less likely to bully than males. Li’s findings related to her secondary research focus, by contrast, were minimally discussed and poorly related to prior research. Li’s draws a single comparison between her finding, that “the vast majority of students’ fail to report cyberbullying to adults”, and a prior research conclusion that “adolescents’ perceptions of their school environments relate to their bullying-related behaviors”. She does so, and unfortunately over-reaches, by proposing a potential causal relationship between failure to report and lack of trust in adults.

*In your view, what is the significance of the study, and what are its primary implications for theory, future research, and practice?*

The significance of this study is severely limited by a number of factors. First, the study’s random sampling may be compromised by the procedures used in implementing the questionnaire, namely possible failure to assure students of privacy and/or anonymity. Second, the questionnaire’s self-reporting mechanism creates potential reliability issues due to possible variance in respondent honesty and compounded by a lack of definitions for “bullying” and “cyberbullying” on the questionnaire. Finally, this descriptive study is intended to add to the existing body of research rather than define causal relationships, therefore negating spurious relationships such as the author’s supposition that failure to report may be caused by lack of trust in adults. These factors, in combination, decrease the significance of the study as well as its implications for future research, theory and practice.