

Publication and Research Trends in Police Psychology: A Review of Five Forensic Psychology Journals

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Abstract Police psychology (PP) articles in five forensic psychology journals (*Behavioral Sciences and the Law*; *Criminal Justice and Behavior*; *Law and Human Behavior*; *Legal and Criminological Psychology*; *Psychology, Crime, and Law*) were identified in order to examine PP publication and research trends within the field of forensic psychology. A level of interest (*LI*) score was calculated by dividing the total number of pages dedicated to PP articles by the total number of journal pages. Article characteristics (e.g., research location, topic) were also coded. The overall *LI*-score across all journals was 0.13, with *Legal and Criminological Psychology* having the highest *LI*-score. Results also showed that interest in PP research is growing, particularly in *Law and Human Behavior* and *Criminal Justice and Behavior*. PP research has primarily been conducted in the United States, dedicated to operational issues, and experimental in nature. The alignment of these research trends with practice is discussed.

Keywords Publication trends · Research trends ·
Police psychology · Forensic psychology · Level of interest

Within forensic psychology, the sub-discipline of police psychology (PP) appears to be expanding both as a research endeavor and as a professional practice. Some indication of the emergent interest in PP comes from (a) the increase in professional societies, specialized journals, peer-reviewed research, books, special issues, and professional conferences dedicated to PP research (Ainsworth 2002; Aumiller

et al. 2007; Bartol and Bergen 1992; Kurke and Scrivner 1995; Miller 2006),¹ and (b) surveys examining the nature of psychological services in policing organizations (Bartol 1996; Delprino and Bahn 1988). Despite this apparent growth, there has been little empirical assessment of PP research trends to date. Consequently, in this study we examined PP research trends in forensic psychology journals and explored the nature of that research.

Some insight into PP research trends was provided by Nietzel and Hartung (1993). They summarized the empirical research that was published on police/law enforcement topics by evaluating the PP articles published in four specialty journals from 1987 to 1991. They found that 8% ($n=22$) of the total articles published ($N=278$) were devoted to PP issues. Thirty-two percent of the 22 identified articles were about eyewitness behavior, 23% were about police discretion in arrest and search procedures, and 14% were about selection, evaluation, and clinical services. Other published topics were police response to victims, attitudes toward the police, polygraph testing, psychology of confessions, and criminal profiling (all less than 10%). They also found that *Law and Human Behavior* published most of the 22 articles (55%), followed by *Criminal Justice and Behavior* (27%), *Journal of Criminal Law and Criminology* (18%), and *Behavioral Sciences and the Law* (0%).

¹ See Society for Police and Criminal Psychology and associated conferences for example of a professional society and professional conferences dedicated to policing and psychology. Several behavioral science journals are dedicated exclusively to the field of policing and publish psychologically related articles include this journal (*Journal of Police and Criminal Psychology*), *Policing and Society*, *Police Practice and Research*, and *Journal of Investigative Psychology and Offender Profiling*. See Snook (2008) for example of special issue dedicated to psychologically-rooted policing practices. It should also be noted that on August 13, 2008, the APA Council of Representatives voted unanimously to recognize Police Psychology as a proficiency in professional psychology (also see Aumiller et al. 2007).

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Although studies examining trends in PP research are scant, further information about the field can be obtained from Delprino and Bahn (1988) and Bartol (1996), who investigated the use of psychology in police practice. Delprino and Bahn invited 336 police departments in the United States to provide information on their use of 25 psychological services and found that the use of those services was rapidly expanding. More than half of the 232 departments that responded used some sort of psychological service, usually for assessing recruits and counseling (e.g., personal and family problems, job-related stress). Between 30% and 50% of the departments used psychological services for various types of training purposes and 10% to 30% used psychological services to assist investigative efforts (e.g., develop psychological profiles, assist hostage negotiations).

More recently, Bartol (1996) surveyed 152 police psychologists (40 in-house, 36 consultants, and 76 part-timers) about the types of services they provide and the amount of time they usually spend on each activity. He found that the psychologists spent an average of 35% of their monthly work activities on pre-employment screening (i.e., police selection) and 28% on counseling/treatment of personnel, family members, or victims. Approximately 7% of their time was spent on training of personnel, 7% on fitness-for-duty evaluations, and 10% on operational activities (i.e., profiling offenders, direct field services such as hostage takings, and other issues like handwriting analysis).

Taken together, these three studies provide some insight about the nature of the PP field. Interestingly, while survey research suggests that that PP practice is primarily dedicated to assessment and counseling of officers (clinical services), Nietzel and Hartung's (1993) study suggests that the majority of published research in forensic psychology journals is dedicated to eyewitness behavior and police discretion. Nietzel and Hartung's results were based on just 5 years of published research, however. The strength of the identified trends in PP research, as well as the current alignment of PP research and practice, is thus somewhat questionable.

In the current study, we examined publication and research trends in PP over approximately three decades. Specifically, this examination addressed five questions regarding PP research within forensic psychology: (1) Has the level of interest in PP research been increasing over the years? (2) What proportion of major forensic psychology journals is dedicated to PP research? (3) Where is the published PP research originating? (4) What PP topic areas are the most widely published? and (5) What types of methodologies are forensic psychologists using to conduct PP research? In addition, we compared our results to the results of the two surveys discussed above to provide an indication of the alignment of research and practice in the PP field.

Method

Sample Articles

In order to select articles for inclusion, we developed a working definition of police psychology. We defined PP as (1) the scientific study of police behaviors, mental processes, and practices, and/or (2) the professional practice of psychology within, or in consultation with, police agencies to provide clinical and mental health services, operational assistance services, and administrative and policy services.

Sample PP articles were those that fit the above definition and were published in the following five forensic psychology journals: *Criminal Justice and Behavior* (CJB; 1974–2006), *Law and Human Behaviour* (LHB; 1977–2006), *Behavioral Sciences and the Law* (BSL; 1983–2006), *Psychology, Crime, and Law* (PCL; 1994–2006), and *Legal and Criminological Psychology* (LCP; 1996–2006). This convenience sample of journals was selected because of their prominence and international influence within the field of forensic psychology. Every article in each issue of each journal was assessed for its suitability for inclusion in the current study.

Procedure

Articles selected for inclusion were coded along the following dimensions:

1. Pages: (1) the total number of pages in a PP article and (2) the total number of pages in each journal issue. Pages dedicated to references, appendices, and introductions to special issues were included in the calculations, however, pages dedicated to book reviews, editorials, acknowledgements, advertisements, announcements, or corrections, were excluded.
2. Article characteristics: (1) journal, (2) volume, (3) issue, (4) year of publication, (5) corresponding author's research location, (6) type of methodology, and (7) topic area (broad and specific). A copy of the coding guide can be obtained from the first author.

Inter-Rater Reliability

Agreement of the coding for article inclusion was assessed by independently coding approximately 10% of the issues, randomly-selected from all 470 issues. The reliability of coding, measured using Cohen's kappa (Cohen 1960), was 0.93 for inclusion of articles. Inter-rater reliability for article characteristics was assessed by independently coding approximately 10% of PP articles, randomly-selected from the 424 PP articles. Cohen's

kappa was 1.00 for number of pages in PP articles, 1.00 for corresponding author's research location, 0.83 for type of methodology, 0.77 for specific topic area, and 0.70 for broad topic area, average kappa was 0.86. All kappa values suggest a high level of agreement between the coders (Fleiss 1981).

Level of Interest and Trend Analysis

To measure the level of interest in PP research, we divided the total number of pages dedicated to PP research by the total number of journal pages to ascertain the proportion of PP pages (henceforth referred to as the *LI-score*; see Moreland et al. 1994). Separate *LI-scores* were also calculated by various article characteristics.

We performed a series of polynomial regressions to test for any linear, quadratic, and cubic effects of years on *LI-scores*. Quadratic and cubic trends were examined because evidence for these trends can demonstrate whether the interest is accelerating or decelerating, rather than simply increasing or decreasing, in addition to showing how trends may have reversed or leveled off over the years. This analysis required the creation of a new variable (year; range 1:33) that represented the number of years since the inaugural year of the earliest journal we included in our study (i.e., *CJB*). For instance, the inaugural year of 1974 for *CJB* was assigned a value of 1 and the year 2006 was assigned a value of 33. This variable was represented by *X* in the regression equations. The different powers of *X* were added to an equation until adding another term did not increase R^2 significantly. The Durbin–Watson (*d*) statistic (a measure of serial correlation between the adjacent residuals in a regression equation) was calculated for the best-fitting equation (see Moreland et al. 1994; Durbin and Watson 1950, 1951). The values of *d* can range between 0 and 4; values below 2 indicate a positive serial correlation, values above 2 indicate a negative serial correlation, and values near 2 indicate no serial correlation. A *d* value between 1 and 3 is generally considered acceptable (Field 2005; Tabachnick and Fidell 2001).

Where data permitted, trend analyses were also performed for article characteristics. With the exception of the article characteristic “journal”, all other trend analysis relating to article characteristics followed the procedure outlined above. Because each journal had a different inaugural year, a “year” variable was created that represented the number of years since the inaugural year of that specific journal. For example, unlike *CJB*, the inaugural year of 1994 for *PCL* was assigned a value of 1 and the year 2006 was assigned a value of 13. As above, the *X* variable in equations found to be statistically significant refers to the number of years since the inaugural year of that particular journal.

Results

Publication Trends

We identified 424 PP articles (out of 3,345 total forensic psychology articles) between 1974 and 2006 in 470 journal issues, *LI-score*=0.13. The number of articles that appeared each year ranged from 0 in 1974 to 40 in 2006. The yearly *LI-scores* are shown in Fig. 1. Although the *LI-scores* fluctuated over the years, ranging from a low of 0.0 in 1974 to a high of 0.26 in 1998, the scores tended to follow a linear pattern. With the exception of 2 years (1975 and 1980), the yearly *LI-score* between 1974 and 1991 was always below 0.10. The yearly *LI-score* ranged between 0.10 and 0.15 between 1992 and 1997, and typically ranged between 0.15 and 0.30 after 1997. The trend analysis of the yearly *LI-scores* revealed that the linear equation, $LI\text{-score}=0.037+0.004X$, fit the data best. The equation was significant, $F(1, 31)=21.517$, $p<0.05$, with an R^2 of approximately 41%. The *d* statistic was 1.712, indicating some positive serial correlation.

A total of 148 articles were identified in *LHB*, 97 in *PCL*, 72 in *CJB*, 66 in *LCP*, and 41 in *BSL*. The overall *LI-score* for each of the journals is shown in Fig. 2. As can be seen, *LCP* and *PCL* had the highest *LI-scores* of 0.32 and 0.31, respectively, followed by *LHB* (0.15), *CJB* (0.09), and *BSL* (0.04), respectively. Trend analysis did not reveal any evidence of a linear, quadratic, or cubic component for *LCP*, *PCL* or *BSL*. Interest in PP research in *LHB* was best predicted using a quadratic equation, $LI\text{-score}=0.143-0.011X+0.0005X^2$. The linear component accounted for 23% of the variance, $F(1, 28)=8.16$, $p<0.05$. When a quadratic component was added, the percentage of variance

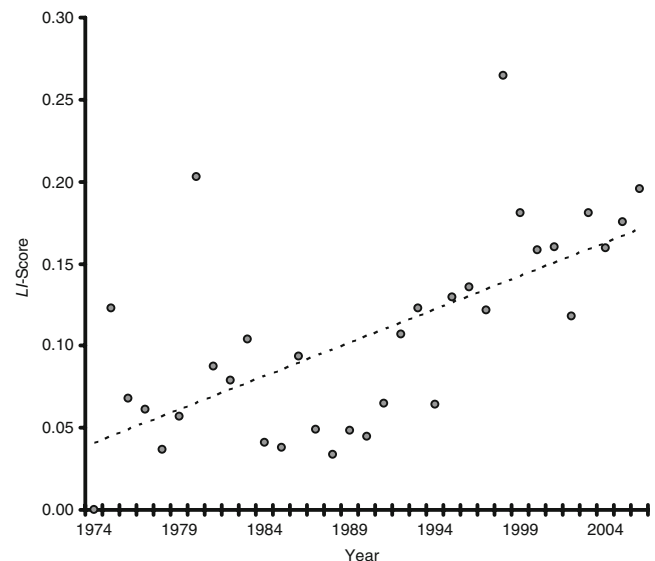


Fig. 1 Level of interest in police psychology research from 1974 to 2006. The *dashed line* represents the linear regression equation

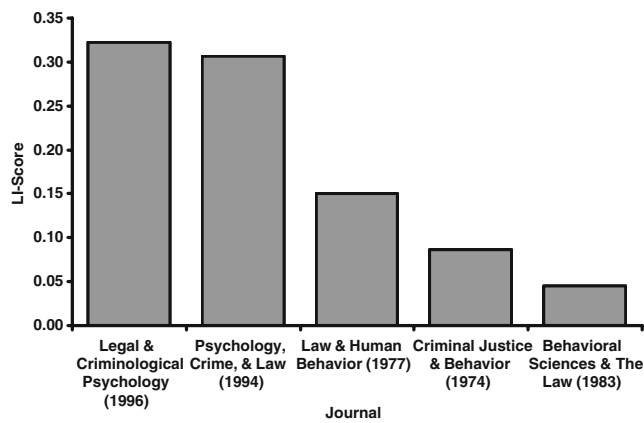


Fig. 2 Level of interest in police psychology as a function of journal. The inaugural year of the journal is located within the *brackets*

increased significantly to 36%, $F(1, 27)=5.603$, $p<0.05$. Adding the cubic component did not significantly increase the variance accounted for. The fit of the quadratic trend suggested that the proportion of pages dedicated to PP research in *LHB* decreased until around 1984 and then changed little until beginning an exponential increase in 1990. The d statistic was 2.041, indicating that there was no serial correlation. For *CJB*, the trend analysis revealed evidence of a significant linear component, $F(1, 31)=6.059$, $p<0.05$, $LI\text{-score}=0.040+0.002X$, with an R^2 of approximately 16%. The d statistic was 2.455, indicating some negative serial correlation.

Research Trends

To gain some understanding of the nature of the published PP research, we examined the article characteristics that were associated with the 424 PP articles. Nearly half of all articles originated in the United States (49%), with researchers in the United Kingdom and Canada contributing 22% and 10% of the articles, respectively. Trend analysis found that there has been an increase in PP research being published by researchers outside of the United States. A quadratic equation, $LI\text{-score}=0.012-0.002X+0.0002X^2$, fit the data best. The linear component accounted for 61% of the variance, $F(1, 31)=47.97$, $p<0.05$. When a quadratic component was added, the percentage of variance increased significantly to 69%, $F(1, 30)=7.594$, $p<0.05$. Adding the cubic component did not significantly increase variance accounted for. The fit of the quadratic trend suggested that the interest in PP from outside of the US has been increasing rapidly since the early 1980s. The d statistic was 1.221, indicating some positive serial correlation.

In terms of the topic of the articles, approximately 76% of the articles focused on operational issues, 15% related to

training issues, and a total of 8% of articles were dedicated to police selection, stress, and administrative issues. A trend analysis found that the level of interest in research on operational issues has been increasing. A linear equation, $LI\text{-score}=-0.008+0.005X$, was significant, $F(1, 31)=43.701$, $p<0.05$, with an R^2 of approximately 59%. Adding the quadratic component did not significantly increase variance accounted for. The d statistic was 1.305, indicating some positive serial correlation.

Most of the research on operational issues ($n=321$) related to eyewitness memory (27%) and lineups (16%). A smaller percentage of research was conducted on interviewing techniques (13%), profiling (10%), deception (7%), and multiple investigative procedures (7%). Research on police discretion, polygraph, Miranda rights, domestics, and searches was relatively less frequent (<3%).

Experiments (26%) were the most widely used method. Quasi-experimental studies (17%) were the next most frequent, followed by theoretical/conceptual/argumentative articles (15%), and reviews/meta-analyses (4%), respectively. The remaining 38% used “other” methods, such as case studies or descriptive analyses. A trend analysis of experimental research (i.e., experimental and quasi-experimental methods combined) found that a linear equation, $LI\text{-score}=-0.008+0.003X$, was significant, $F(1, 31)=80.536$, $p<0.05$, with an R^2 of approximately 72%. Adding the quadratic component did not significantly increase variance accounted for. The d statistic was 1.082, indicating some positive serial correlation.

Discussion

An examination of publication and research trends in five forensic psychology journals showed that 13% of the pages in those journals were dedicated to PP articles, with *LCP* having the highest percentage of pages dedicated to PP research. At the individual journal level, *CJB* and *LHB* have been increasing the proportion of pages dedicated to PP articles that they publish each year. These findings suggest that interest in PP among forensic psychologists may be growing and supports previous observations that interest in PP research has been increasing (see Bartol and Bergen 1992). The results also indicated that the PP research in the reviewed journals was conducted primarily in the United States; although the proportion of published research originating in other countries has increased in recent years. The PP research was primarily dedicated to operational issues, and most used an experimental design.

These results contribute to a debate about the inclusive nature of the definition of forensic psychology. Some psychologists (e.g., Otto and Heilbrun 2002) adopt the definition provided by the American Board of Forensic

Psychology and the American Psychology-Law Society as “the professional practice by psychologists within the areas of clinical psychology, counseling psychology, neuropsychology, and school psychology, when they are engaged regularly as experts and represent themselves as such, in an activity primarily intended to provide professional psychological expertise to the judicial system” (ABFP and AP-LS 1995, p. 5). As can be seen, police psychology as a practice or research endeavor is not encompassed by this definition. In contrast, others adopt a broader definition of forensic psychology as “the research endeavor that examines aspects of human behavior directly related to the legal process...and the professional practice of psychology within or in consultation with a legal system that encompasses both criminal and civil law and the numerous areas where they intersect” (Bartol and Bartol 1999, p. 3). This latter definition includes both research and practice, and is not limited to selected sub-disciplines of psychology. Given that 13% of the pages in five prominent forensic psychology journals have been dedicated to PP topics, some forensic psychologists clearly see the importance of including such material in these journals. The inclusion of PP issues in forensic journals supports the adoption of Bartol and Bartol’s broader definition of forensic psychology.

It is interesting that the majority of published research in the current study was about operational issues of policing. Because PP by its very nature aims to facilitate police services, one would expect PP research to be driven by knowledge of practitioner needs. Knowledge regarding these needs can be attained from previous research that has directly asked practitioners about the psychological services that they deem important (Delprino and Bahn 1988) and the amount of time that practitioners spend on various activities (Bartol 1996). Delprino and Bahn, for example, found that police departments reported a need for psychological assessment of recruits, evaluation of candidates for promotion, and training police personnel in human relations techniques. However, similar to Neitzel and Hartung (1993), we found that the majority of PP research in forensic psychology journals focused on operational issues, suggesting a discrepancy between police practitioner needs and the aspects of PP that is being published. Bartol’s study of police psychologists’ monthly work activities further suggests a discrepancy; his participants reported that most of their time was spent on pre-employment screening and counseling/treatment of personnel, family, and victims. Perhaps the inclusion of journals dedicated specifically to PP issues or a survey of police activities that is more recent would reflect a closer alignment of scientific research and practice in the field. Nonetheless, it is surprising that practitioner needs are not at least moderately represented in the published research in five core forensic psychology journals. Having said that, research dealing with specific practitioner needs is being published

more specialized journals (e.g., *Journal of Police and Criminal Psychology*).

The current study had at least two limitations. Firstly, we did not include every forensic psychology journal in our sample. Although we deem the convenience sample of five journals used in the current study to be representative of forensic psychology research, it is certainly possible that the use of a different combination of journals, or a larger number of them, might result in different findings. Moreover, we relied solely upon trends in peer-reviewed, published research to examine the growth of the PP field. We encourage others to expand our research efforts by examining other indicators of PP trends (e.g., the number of published books and professional conferences). Secondly, because we did not examine the level of interest in other areas of forensic psychology (e.g., corrections, juries), we can not comment on whether a *LI*-score=0.13 is relatively low or high. We look forward to future summaries of research in other areas of forensic psychology that use a similar methodology in order to determine the relative attention given to PP research. Due to the subjective nature of some of the coding and the limitations mentioned above, we emphasize the need for replication and expansion of the results presented herein.

To sum up, the level of interest in PP research has been increasing over the years. Forensic psychology journals (i.e., *LCP* and *PCL*) have emerged in the past decade that are dedicating nearly a third of their pages to PP, researchers located in countries other than the United States are increasingly publishing PP articles in the forensic psychology journals examined here, and the PP research appearing in these journals is largely empirical. These results combined suggest a growth in the PP field as well as increased recognition that PP ought to be captured in definitions of forensic psychology. The field, however, would likely benefit from a better alignment between scientific research and the needs of practitioners.

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References

- Ainsworth PB (2002) Psychology and policing. Willan, Devon, UK
- American Board of Forensic Psychology and American Psychology-Law Society (1995) Petition for the recognition of a specialty in professional psychology. Available at <http://www.apa.org/crsppp/petforen.pdf>. Accessed on February 4, 2008
- Aumiller G, Corey D, Allen S, Brewster J, Cuttler M, Gupton H, Honing A (2007) Defining the field of police psychology: core domains and proficiencies. *J Police Crim Psychol* 22:65–76

- Bartol CR (1996) Police psychology: then, now, and beyond. *Crim Justice Behav* 23:70–89
- Bartol CR, Bartol AM (1999) History of forensic psychology. In: Hess AK, Weiner IB (eds) *The handbook of forensic psychology*. 2nd edn. Wiley, New York, pp 3–23
- Bartol CR, Bergen GT (1992) Police psychology and its future. *Crim Justice Behav* 19:236–239
- Cohen JA (1960) A coefficient of agreement for nominal scales. *Educ Psychol Meas* 20:37–46
- Delprino RP, Bahn C (1988) National survey of the extent and nature of psychological services in police departments. *Prof Psychol Res Pract* 19:421–425
- Durbin J, Watson GS (1950) Testing for serial correlation in least squares regression: I. *Biometrika* 37:409–428
- Durbin J, Watson GS (1951) Testing for serial correlation in least squares regression: II. *Biometrika* 38:159–177
- Field A (2005) *Discovering statistics using SPSS*, 2nd edn. Sage, London
- Fleiss JL (1981) *Statistical methods for rates and proportions*. Wiley, New York
- Kurke MI, Scrivner EM (1995) *Police psychology into the 21st century*. Erlbaum, Hillsdale, NJ
- Miller L (2006) *Practical police psychology: stress management and crisis intervention for law enforcement*. Charles C. Thomas, Springfield, IL
- Moreland RL, Hogg MA, Hains SC (1994) Back to the future: social psychological research on groups. *J Exp Soc Psychol* 30:527–555
- Nietzel MT, Hartung CM (1993) Psychological research on the police: an introduction to a special section on the psychology of law enforcement. *Law Hum Behav* 17:151–155
- Otto R, Heilbrun K (2002) The practice of forensic psychology: a look toward the future in light of the past. *Am Psychol* 57:5–19
- Snook B (2008) Introduction to the special issue: pseudoscientific policing practices and beliefs. *Crim Justice Behav* 35:1211–1214
- Tabachnick BG, Fidell LS (2001) *Using multivariate statistics*, 4th edn. Allyn and Bacon, Boston