

International Factors in the CSCW 2008 Submission and Review Process

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ABSTRACT

We analyzed submissions to the CSCW 2008 conference according to the geographical region of the primary author to determine whether there were biases in the review process. Primary author region was associated with the likelihood that a Paper or Note would be discussed at the program committee meeting, but did not influence the decision process for those submissions that were discussed.

Author Keywords

International factors, review process.

ACM Classification Keywords

K.4.2 [Computers and Society]: Social Issues.

INTRODUCTION

CSCW is an international conference that draws submissions and attendees from around the world. Yet, its historical origins and location of the conference are rooted in North America. We reflect on how well the conference attracts submissions from the international community and how those submissions fare in the review process.

This effort builds on a similar analysis done for CHI in 1995 [2], which found that submissions from North America were accepted at a higher rate than those from other regions. They identified some common reasons non-North American papers were rejected (e.g., not new or significant, poor focus, poor writing) and suggested mechanisms for addressing these concerns (e.g., mentoring, writing guides). While CSCW 2008 did not have a mentoring program, it did have a writing guide [1]. Furthermore, the CSCW 2008 Program Committee (PC) included members from different geographical regions (28 North Americans, 7 Europeans, 1 Asian).

We analyzed all 370 submissions to the Papers and Notes venues to identify if there was a difference in acceptance rates based on the primary author's country of origin. We also analyzed the primary meta-review of a subset of the submissions discussed at the PC meeting. These reviews were coded along similar lines as the CHI 1995 analysis to identify any criticisms common to international papers.

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Regional background of the primary author was associated with the likelihood that a Paper or Note would be discussed at the meeting, but did not influence the decision for those submissions that were discussed.

INITIAL PAPER CATEGORIZATIONS

All submissions were classified using the first author's affiliation into North American, European, Asian, and Other. Figure 1 demonstrates strong global participation.

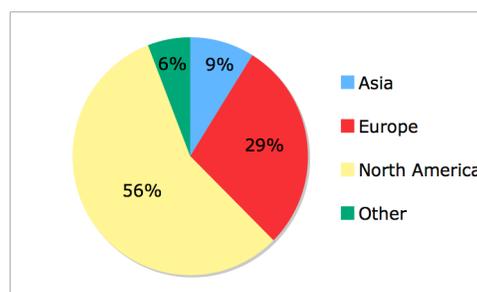


Figure 1. Percentage of submissions by region.

We examined the initial categorization of submissions as “tentative accept,” “tentative reject” or “discuss at PC meeting” as a function of the first author's regional background. As shown in Table 1, there was a dramatic effect of the authors' region on submissions' initial categorization. North American submissions were much more likely to be tentative accepted category than those from other regions ($X^2 [6] = 19.36, p < .005$).

Region	Tent. Accept	Discuss	Tent. Reject
Asia	3%	21%	76%
Europe	5%	28%	67%
North America	16%	33%	51%
Other	5%	24%	71%

Table 1. Initial categorization by author region

These initial categorizations differences reflect significant differences in initial average review scores for submissions from different regions (Figure 2). A region by submission type ANOVA indicated significant effects of both region ($F [3, 362] = 9.56, p < .001$) and submission type ($F [1, 362] = 4.61, p < .05$), but no interaction. Post-hoc LSD tests indicated that the mean scores for North American papers were significantly higher than those for any other region.

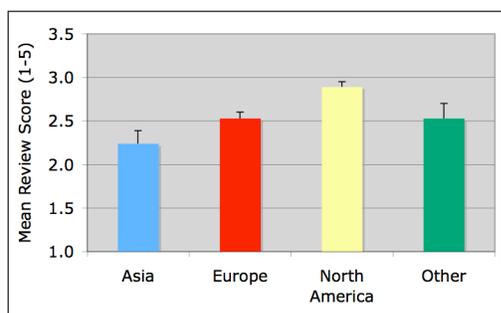


Figure 2. Mean review score on a scale of 1 (definitely reject) to 5 (definitely accept) by first author's regional affiliation.

PC MEETING PROCESS

We next examined whether authors' regional affiliations influenced decision-making at the PC meeting. A total of 112 Papers and Notes were discussed, including all submissions with mean initial scores between 3.0 and 3.8 (5 = definitely accept). We coded whether the Associate Chair (AC) in charge of the submission was from North America or not. Then, we coded meta-reviews using a simplified version of Isaacs & Tang's system [2] (see Table 2).

Category	Examples
<i>Content Criticisms</i>	
Not new/ significant	Ex – already shown, premature
Improper method	Ex -bad research method or execution
Wrong conference	Ex- does not fit with CSCW
<i>Argument Criticisms</i>	
Relevance	Ex- doesn't relate to existing work
Incomplete	Ex-ideas not well developed,
Poorly Argued	Ex-wrong statistical analyses
Poor focus	Lack of focus, disorganized
<i>Writing Criticisms</i>	
Description	Ex - study details unclear
Writing	Ex-undefined technical terms

Table 2. Coding scheme for meta-reviews (adapted from [2])

Each submission received a "1" for a problem category that was mentioned once or more in the meta-review. We summed problems in content (0-3), argumentation (0-4) and writing (0-2) for each submission, and added across the categories for a total problem score of 0-11. Mean problems per region are shown in Table 3. ANOVA showed no overall region effects but post-hoc tests suggested a trend toward more writing problems in Asian papers ($p < .07$) and more argument problems in European papers ($p < .07$), consistent with Isaacs & Tang's earlier work [2].

Region	Content	Argument	Writing	Total
Asia	.71	1.30	1.30	3.29
Europe	.80	1.97	.90	3.67
N. America	.67	1.60	.76	3.06
Other	.60	1.20	.80	2.60

Table 3. Mean problems per discussed submission by region.

We examined what factors influenced the acceptance of a submission after discussion at the PC meeting. Since accept/reject is binary, we used logistic regression to predict the final decision from author region, problems with the paper, AC background, mean review scores prior to PC meeting, and standard deviation of those review scores. The authors' regional background had no significant effect on the likelihood of acceptance, nor did whether the AC was from North America. Mean review scores prior to the meeting did matter. Papers and Notes that had higher mean scores were, not surprisingly, more likely to be accepted ($p < .001$). In addition, submissions with more variation in scores (indicating that at least one reviewer rated the submission highly) were more likely to get in ($p < .01$). Notes were somewhat less likely to be accepted than Papers ($p < .09$). There was no effect of the total number of problems identified on the decision.

Given the key role of mean scores in influencing decisions on a submission, we next used linear regression to see if we could predict these scores using the same variables as before (author region, AC background, submission type, total problems). These factors were not very good predictors of mean scores, and the overall model was not significant. However, total problems had a significant effect ($t = -2.09$, $p < .05$). For each new problem identified with a submission, the mean rating went down by .07.

DISCUSSION

Two general conclusions can be drawn from our initial analyses. First, the Program Committee meeting process itself appears to be unbiased, in that the final are determined strongly by prior reviews but not by authors' regional backgrounds. Second, there is substantial bias in terms of which Papers and Notes get discussed at this meeting. North American submissions are more likely to be accepted without discussion and less likely to be rejected without discussion than submissions from other parts of the world. For this report, we only coded meta-reviews for the 118 submissions discussed at the meeting. Our next step will be to code the remaining meta-reviews to identify the factors that lead to this bias in initial categorization.

ACKNOWLEDGEMENTS

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