1 **Acceptance rates for manuscripts submitted to veterinary peer-reviewed journals in**

2 **2012**

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15 Running head: Acceptance rates for veterinary journals

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17 **Abstract**

18 Reasons for performing study. Relatively few journals publish their annual acceptance rate,

19 although this figure is of scientific and academic interest.

20 Objectives. To determine the acceptance rate for manuscripts submitted to veterinary peer-

21 reviewed journals during 2012 and to determine the proportions of submitted manuscripts

22 that were accepted without revision, accepted after revision or rejected.

23 Study design. Self-reporting questionnaire distributed to editorial contacts and returned by

24 Email with data submission by insertion into a template.

25 Methods. Editors of 118 peer-reviewed journals listed in the Web of Science in the subject

26 category *veterinary sciences* were invited by Email to submit data pertinent to manuscripts

27 submitted to their journal in 2012.

28 Results. Data were received from 30 (26%) journals. Average (±SD) acceptance rate was

29 47% (±15%). On average 3% (±5%) submitted manuscripts were accepted without revision,

30 44% (±15%) manuscripts were accepted after revision, 4% (±4%) manuscripts were

31 withdrawn by authors, 46% (±17%) manuscripts were rejected and 3% (±5%) manuscripts

32 were still pending at the end of the study period.

33 Conclusions. With so few manuscripts accepted without revision, prospective authors must

34 expect to expend time and effort revising and resubmitting their manuscripts for publication.

35 Although authors are frequently able to correct manuscript flaws identified by reviewers, the

36 knowledge that less than half submitted manuscripts are accepted might help stimulate

37 prospective authors to try to submit better quality manuscripts.

38 **Introduction**

39 Publication in a peer-reviewed journal requires a submitted manuscript to pass scrutiny by

40 one or more reviewers chosen by the journal Editor on the basis of their experience and asked

41 to judge its quality [1,2]. On the basis of peer-review, manuscripts may be accepted for

42 publication, returned for revision and resubmission, or rejected. Many manuscripts requiring

43 revision and resubmission are ultimately accepted for publication [3] and many rejected

44 manuscripts are accepted subsequently by other journals [4,5,6].

45 The proportion of submitted manuscripts that are subsequently accepted for publication by a

46 journal (the acceptance rate) will depend on various factors, including the quality of

47 manuscripts submitted, the rate at which new manuscripts are received by the journal, the

48 number of papers already accepted into the publication process and the page capacity of the

49 journal. The average acceptance rate for 17 radiology journals surveyed in 2006 was 52% [7].

50 Journals may include acceptance rate in their web site (e.g.

51 http://veterinaryrecord.bmj.com/site/about/) or publish this information as part of an annual

52 review [8], but most do not publish acceptance rates, possibly because prospective authors

53 could be discouraged by a low acceptance rate. On the other hand, it seems clear that many

54 prospective authors need more guidance about manuscript submission [9,10,11] and knowing

55 how many manuscripts are rejected might help stimulate efforts to submit better quality

56 manuscripts. Among a group of veterinary journal Editors consulted informally by the

57 authors when planning the present study, there was a general view that prospective authors

58 and editorial boards would find a review of acceptance rates to be interesting.

59 The aim of the present study was to determine the acceptance rate for manuscripts submitted

60 to veterinary peer-reviewed journals during 2012. A secondary aim was to determine the

61 proportions of submitted manuscripts that were accepted without revision, accepted after

62 revision or rejected.

63

64 **Methods**

65 Editorial contact details were sought for all peer-reviewed journals listed in the Web of

66 Science[a] in the subject category *veterinary sciences*. Peer-reviewed journals were identified

67 on the basis of their editorial policy statement. A message (see Appendix 1) explaining the

68 background to the present study and inviting Editors to submit data pertinent to manuscripts

69 submitted to their journal between 1st January and 31st December 2012 was sent to each of the

70 Email addresses found for editorial contacts of peer-reviewed journals. The message was sent

71 in December 2013 and a reply was requested within 12 weeks of receipt of the invitation to

72 submit data. A reminder was sent 4 weeks before the deadline. Editors were requested to

73 submit data by insertion of numbers of manuscripts into a template (Figure 1). Major revision

74 was defined as that requiring a second review by scrutineers. Reasons for rejection were not

75 requested. Editors were advised that data from their journal would be included anonymously

76 if that was their wish. Editors were also asked to give a reason if their journal elected not to

77 provide data.

78 For each peer-reviewed veterinary journal listed in the Web of Science, total citations in

79 2012, total number of articles published in 2012, and the impact factor were recorded. It

80 should be noted that the journal impact factor is based on data for the preceding two years

81 (i.e. impact factor for 2012 = citations to 2010-11 articles divided by number of 2010-11

82 articles). The acceptance rate was calculated as the number of manuscripts accepted

83 (including those accepted after revision/resubmission) divided by the total number of

84 manuscripts submitted. For journals providing acceptance data, the total number of articles

85 published in 2012 was subdivided into original articles and reviews, based on document types

86 listed in the Web of Science.

87   Data were analysed using SPSS Statistics version 19[b]. Based on visual assessment of

88   histograms and Normal plots, distributions for the number of citations, total number of

89   articles published, and journal impact factor were characterized by positive skew, hence

90   subsequent testing of differences between responding and non-responding journals was done

91   using the Mann-Whitney test. Correlations between acceptance rate and number of citations

92   per year, total number of articles published per year, journal impact factor, number of

93   manuscripts submitted per year, and the proportion of published articles that were reviews

94   were tested using Spearman's rho. Results with $p < 0.05$ were considered significant.

95

96   **Results**

97   Of 143 journals listed in the Web of Science subject category *veterinary sciences*, the

98   websites of 126 included an editorial policy statement indicating peer-review of submitted

99   manuscripts. Emails were sent to 122 peer-reviewed journals for which an Email address for

100   editorial contact was found. Automated error messages indicating the Email was

101   undeliverable were received in four instances, hence Email contact appeared to be functional

102   in 118 instances.

103   Data were received by the deadline from 30/118 (26%) peer-reviewed journals contacted.

104   Characteristics of these journals, based on their Web of Science entries for 2012, are

105   summarised in Table 1. Of the five (4%) journals that gave a reason for not providing data,

106   data were not readily available in three and the Editor was unwilling to participate in two. No

107   reply was received from the remaining 83 (70%) journals. The number of citations per year,

108   total number of articles published and impact factor for responding and non-responding

109   journals are summarized in Table 2. Responding journals had more citations and more

110   articles published than non-responding journals. There was no significant difference in

111   impact factor.

112   For manuscripts submitted to 30 responding veterinary journals in 2012, the average ($\pm$SD)

113   acceptance rate was 47% ($\pm$15%). Acceptance rate was weakly negatively correlated with

114   number of citations (rho = -0.44, p=0.014), total number of articles published (rho = -0.38,

115   p=0.04) and journal impact factor (rho = -0.38, p=0.04). Acceptance rate was more strongly

116   inversely correlated with the number of manuscript submitted per annum (rho = -0.60,

117   p=0.002). Acceptance rate was not correlated with the proportion of published articles that

118   were reviews (rho = 0.31, p=0.13).

119   Of the 30 responding journals, six reported only their overall acceptance rate and 24 provided

120   a completed data template. On average, 3% submitted manuscripts were accepted without

121   revision, 44% manuscripts were accepted after revision, 4% manuscripts were withdrawn by

122   authors, 46% manuscripts were rejected outright and 3% manuscripts were still pending at the

123   end of the study period (Table 3). Minor revisions were requested for 20% manuscripts and

124   major revisions were requested for 36% manuscripts. On average, all manuscripts requiring

125   minor revisions and 67% manuscripts requiring major revisions were eventually accepted

126   (Figure 2).

127

128   **Discussion**

129   For 30 peer-reviewed veterinary journals reporting their acceptance rate for 2012, the average

130   was 47%. On average only 3% manuscripts were accepted without revision and 44%

131   manuscripts were accepted after revision. Although there were variations between journals

132   (e.g. acceptance rate varied between 25% and 89%), these summary figures make clear the

133   demanding nature of peer-reviewed publication. With so few manuscripts accepted without

134   revision, prospective authors must expect to expend time and effort revising and resubmitting

135   their manuscripts for publication. On average all manuscripts requiring minor revisions and

136   67% of those requiring major revisions were eventually accepted, hence authors are

137   frequently able to correct manuscript flaws identified by reviewers. One of the benefits of the

138   peer-review process is that it frequently helps authors to improve the scientific quality and

139   readability of their manuscript [12], although the quality of reviewers is known to be variable

140   [13,14,15].

141   For this study, data were collected using a self-reporting questionnaire method based on a

142   detailed template delivered and returned by Email. This questionnaire method enables large

143   numbers of potential respondents to be contacted efficiently and produces quantitative data

144   amenable to analysis without the need for substantial coding or cleaning; however, it

145   typically produces relatively low rates of return. The response rate of 26% is compatible with

146   this expectation. The 30 responding journals may be considered a representative sample

147   based on their total citations, total number of articles published and journal impact factor,

148   which all overlapped substantially with the ranges for non-responding journals; however,

149   with respect to their primary focus, the 30 responding journals represent a heterogeneous

150   group, containing examples of journals with clinical, research, species- and speciality-

151   specific content, and with differing proportions of original research papers, case reports,

152   reviews, editorials and letters. Just as the subject matter and content of these journals is

153   heterogeneous, so will be their readership (which includes prospective authors).

154   Consequently, it is probably not appropriate to emphasise the differences in results between

155   journals.

156   All journals in this study had a stated policy that implied that all submitted manuscripts

157   underwent peer-review. Journals that employ a mixed editorial policy in which only a

158   proportion of submitted manuscripts undergo peer-review may calculate acceptance rates

159   differently, for example based only on the peer-reviewed manuscripts. Differences in

160   editorial practice (e.g. inconsistent definitions of a resubmission and the inclusion/exclusion

161   of invited papers, correspondence or book reviews in the calculations) and the potential

162   unreliability of self-reported data, further complicate comparisons of published acceptance

163   rates [16].

164   Acceptance rate was weakly negatively correlated with number of citations, total number of

165   articles published and journal impact factor. A peer-reviewed journal with a relatively large

166   number of annual citations and published articles is more likely to be considered authoritative

167   in its subject and a popular target for prospective authors, hence a tendency for a lower

168   acceptance rate probably reflects heightened selection by an Editor receiving a surplus of

169   manuscripts. Similarly, the finding that acceptance rate was inversely correlated with the

170   number of manuscript submitted per annum makes sense if a journal publishes roughly the

171   same number of articles each year because an increased number of submitted manuscripts

172   must be balanced by a lower acceptance rate if the Editor wishes to avoid prolonged time to

173   publication. None of these correlations is strong, probably because the variables relate to

174   different years (journal impact factor to 2010-11; total citations and total number of articles

175   published to 2012; acceptance rate to 2012-14) and because acceptance rate will also depend

176   on the quality of submitted manuscripts. A weak positive correlation between journal impact

177   factor and rejection rate (approximately equal to 1 minus acceptance rate) has been reported

178   previously and used as evidence that journal impact factor is not a measure of publication

179   quality [7].

180   Journal subject area and editorial practices also affect acceptance rates [17]. For example,

181   acceptance rates are lower for business and computer science journals than for medical

182   journals, for North American journals compared to journals form other regions of the world,

183   and for journals that employed three or more reviewers per submission than for journals that

184   used one or two [17].

185   In the present study, acceptance rate was not correlated with the proportion of published

186   articles that were reviews. The proportion of published articles that were reviews was

187   included as a variable because of the possibility that it could affect acceptance rate, but this

188   appears not to be the case. Compared to original research papers, review articles might be

189   more likely to be accepted because their factual content is based primarily on data already

190   published and because inclusion of reviews is associated with higher journal impact factor

191   [7]; conversely, review articles might be more likely to be rejected because they contain no

192   new data.

193   This survey of journal acceptance rates is not intended to be used by prospective authors as a

194   means of maximizing the likelihood of manuscript acceptance by picking a journal with a

195   high acceptance rate. Prospective authors have been advised not to submit their manuscripts

196   to journals chosen on the basis of their acceptance rate [7] or impact factor [17,18]. The

197   authors' primary interest – dissemination of their research results – is usually best served by

198   publishing in journals whose readership most closely matches their own profile [7], hence

199   that consideration should take priority when selecting a journal. Attempting to publish a

200   paper in a journal peripheral to an author's field of study is not recommended because

201   manuscripts with content not well-suited to the target journal are likely to be rejected outright

202   [3]. In the present study, the proportion of manuscripts rejected will include manuscripts

203   outside the scope of the journal, which will be rejected regardless of quality (and possibly

204   without peer-review).

205   If the results of this survey prove to be useful to authors, it is likely to be because they make

206   clear the magnitude of the selection pressure on manuscripts submitted to peer-reviewed

207   journals, and the need to understand the criteria of quality used by reviewers and editors and

208   to ensure that their manuscript satisfies these criteria before submission. A manuscript

209   prepared well for submission will be free of the flaws recognised as major reasons for

210   manuscript rejection, including lack of new or useful information, methodological errors,

211   deficiencies in data and poor writing [3,10,19-23]. It is hoped that knowledge of journal

212   acceptance rates will help stimulate prospective authors to try to submit better quality

213   manuscripts.

214 Table 1. Veterinary peer-reviewed journals that provided acceptance rate data for 2012

215

Journal	Citations	Articles published	Proportion of review articles	Impact factor
Theriogenology	13198	428	5%	2.082
Veterinary Microbiology	12083	441	2%	3.127
Veterinary Record	10356	265	<1%	1.803
Applied Animal Behaviour Science	5989	160	6%	1.497
Equine Veterinary Journal	5734	156	4%	2.286
Avian Diseases	4783	162	2%	1.734
Preventative Veterinary Medicine	4589	172	5%	2.389
Veterinary Pathology	4190	119	na	1.929
Reproduction in Domestic Animals	2880	348	3%	1.392
Journal of Small Animal Practice	2874	115	6%	1.177
Canadian Veterinary Journal	2373	135	4%	0.767
Veterinary Radiology and Ultrasound	2194	101	na	1.414
Journal of Veterinary Pharmacology and Therapeutics	2150	104	3%	1.349
Scientific and Technical Review (Organisation Mondiale de la Santé Animale)	1755	46	9%	0.69
Journal of Feline Medicine and Surgery	1310	130	20%	1.08
Journal of Animal Physiology and Animal Nutrition	1202	128	2%	1.254
Veterinary Ophthalmology	1051	93	2%	0.959
Comparative Medicine	971	68	1%	1.12
Veterinary Anaesthesia and Analgesia	950	72	na	1.34
Pesquisa Veterinária Brasileira	817	248	1%	0.538
Equine Veterinary Education	648	89	16%	0.697
Acta Veterinaria Hungarica	604	46	2%	1.173
Revue de Médecine Vétérinaire (Toulouse)	586	81	na	0.251
Journal of the American Association for Laboratory Animal Science	557	80	10%	1.145
Brazilian Journal of Veterinary Parasitology	498	85	8%	0.722
Journal of the Faculty of Veterinary Medicine, University of Kafkas	371	225	2%	0.458
Wiener Tierärztliche Monatsschrift	233	44	2%	0.392
Vlaams Diergeneeskundig Tijdschrift	147	37	38%	0.361
Philippine Journal of Veterinary Medicine	30	15	na	0.059
Journal of the Hellenic Veterinary Medical Society	26	25	48%	0.273

216 _____

217 na, data not available

218   Table 2. Comparison of responding and non-responding journals

219

220	Responding	Non-responding	p
221 n	30	92	
222 Total citations	1256 (26-13,198)	756 (28-12,644)	0.049
223 Number of articles published	110 (15-441)	64 (0-602)	0.024
224 Impact factor	1.16 (0.06-3.13)	0.92 (0.07-3.43)	0.31

225   _____

226   Values are median (range)

227 Table 3. Acceptance rates and fates of manuscripts submitted to veterinary peer-reviewed journals in
228 2012

229

| Journal name	Total manuscripts submitted	Acceptance rate	Accepted without revision	Accepted after revision	Withdrawn	Rejected	Pending
Veterinary Record	801	33%	43 (5%)	220 (27%)	0	538 (67%)	0
Journal of the Faculty of Veterinary Medicine, University of Kafkas	631	41%	0	260 (41%)	4 (1%)	366 (58%)	1 (0%)
Reproduction in Domestic Animals	516	27%	0	139 (27%)	5 (1%)	346 (67%)	26 (5%)
Journal of Animal Physiology and Animal Nutrition	496	25%	1 (0%)	121 (24%)	12 (2%)	346 (70%)	16 (3%)
Equine Veterinary Journal	418	43%	23 (6%)	158(38%)	20 (5%)	211 (50%)	6 (1%)
Journal of Small Animal Practice	383	29%	11 (3%)	101(26%)	10 (3%)	259 (68%)	2 (1%)
Canadian Veterinary Journal	258	45%	3 (1%)	112(43%)	3 (1%)	140 (54%)	0
Revue de Médecine Vétérinaire (Toulouse)	247	38%	2 (1%)	93(38%)	19 (8%)	126 (51%)	7 (3%)
Journal of Veterinary Pharmacology and Therapeutics	230	37%	0	85(37%)	0	145 (63%)	0
Journal of Feline Medicine and Surgery	221	52%	9 (4%)	106(48%)	5 (2%)	101 (46%)	0
Veterinary Radiology and Ultrasound	219	45%	0	99(45%)	4 (2%)	116 (53%)	0
Veterinary Anaesthesia and Analgesia	218	40%	4 (2%)	84(39%)	2 (1%)	127 (58%)	1 (0%)
Veterinary Ophthalmology	206	57%	39(19%)	79(38%)	0	88 (43%)	0
Avian Diseases	196	56%	2 (1%)	108(55%)	20 (10%)	65 (33%)	1 (1%)
Journal of the American Association for Laboratory Animal Science	175	43%	0	75(43%)	5 (3%)	62 (35%)	33 (19%)
Comparative Medicine	169	38%	1 (1%)	63(37%)	3 (2%)	75 (44%)	27 (16%)
Equine Veterinary Education	147	63%	27(18%)	66(45%)	0	47 (32%)	7 (5%)
Acta Veterinaria Hungarica	145	37%	6 (4%)	48(33%)	4 (3%)	87 (60%)	0
Brazilian Journal of Veterinary Parasitology	128	67%	0	86(67%)	7 (5%)	35 (27%)	0
Philippine Journal of Veterinary Medicine	53	43%	1 (2%)	22(42%)	5 (9%)	20 (38%)	5 (9%)
Vlaams Diergeneeskundig Tijdschrift	49	59%	0	29(59%)	5 (10%)	13 (27%)	2 (4%)
Wiener Tierärztliche Monatsschrift	45	89%	1 (2%)	39(87%)	2 (4%)	3 (7%)	0
Scientific and Technical Review (Organisation Mondiale de la Santé Animale)	40	38%	0	15(38%)	7 (18%)	15 (38%)	3 (8%)
Journal of the Hellenic Veterinary Medical Society	20	70%	0	14 (70%)	2 (10%)	4 (20%)	0
Range	20-801	25-89%	0-43	14-260	0-20	3-538	0-33
Average (±SD)	251 (±198)	47% (±15%)	3% (±5%)	44% (±15%)	4% (±4%)	46% (±17%)	3% (±5%)

230

231 **Legends**
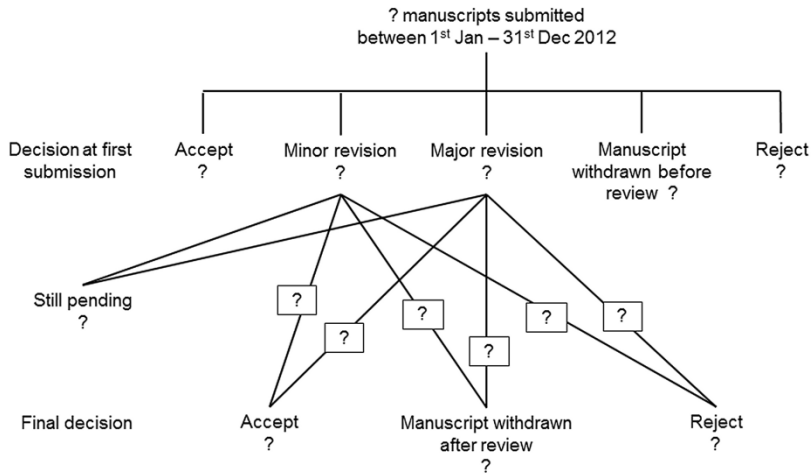
232

233 Figure 1. Template used for data entry by veterinary journal Editors.

234
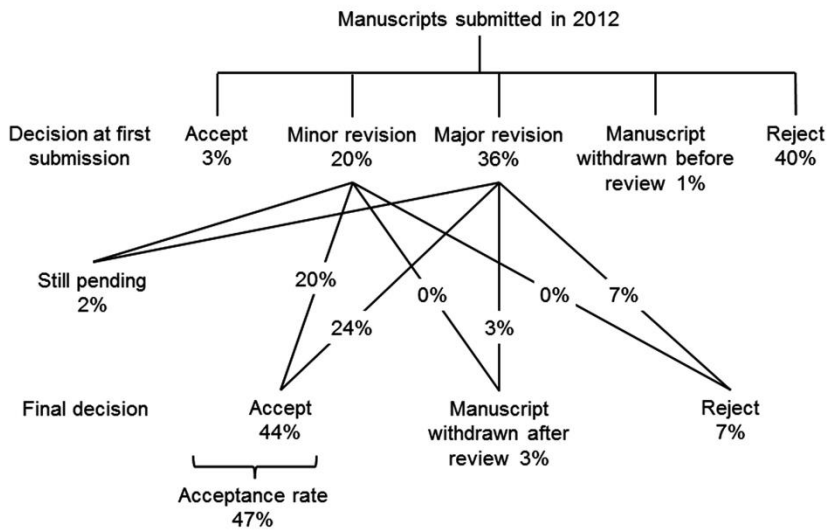
235

236 Figure 2. Fate of manuscripts submitted to 24 veterinary journals.

237 **Manufacturers' details**

238 [a] Thomson Reuters New York, NY 10036, USA

239 [b] IBM Corporation, Chicago, IL60606, USA

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