SDI Review Form 1.6

Journal Name:	**British Journal of Mathematics & Computer Science**
Manuscript Number:	**2013_BJMCS_6371**
Title of the Manuscript:	**On the Existence and Nonexistence of Positive Solutions for Singular Quasilinear Elliptic Equations with Gradient Terms**
Type of the Article	**Research Paper**

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.
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PART 1: Review Comments

	Reviewer's comment	**Author's comment** *(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)*
Compulsory REVISION comments	**1 - The main result of the manuscript is a direct extension of a result to the p-Laplacian operator from a recent result involving the Laplacian operator [see page 79 of the following work: M. Ghergu, Singular Semilinear Elliptic Equations with Subquadratic Gradient Terms, M. Reissig and M. Ruzhansky (Editors), Springer Proceedings in Mathematics & Statistics, Volume 44, 2013, pp 75-91]. The proof is exactly the same. I believe that at least authors should have taken the trouble to write different words of the original paper before mentioned and put some details in order to show and highlight differences and difficulties (that to my understanding there are not) of working with the p-Laplacian operator.** **2. Lemma 4.1 is also an extension to the p-Laplacian operator of a recent result for the Laplacian (see Lemma 3 in the above mentioned work by Ghergu). Again are not mentioned technical differences or difficulties arisen regarding that other. Moreover, Theorem 2 of this manuscript is not a full extension of to the Theorem 3 of the work by Ghergu, and no reason of this is given.**	
Minor REVISION comments	**1. In page 9, should say $\overline{u}_1\in C_{loc}^{1+\alpha}(B_R)\cap C(\overline{B}_R)$** **2. In page 9 says 'supsolution' or 'sup-solution' or 'super-solution', but it should say 'supersolution' in**	

	every one. **3. In page 9, after equation (4.12) says 'It is obvious that $\underline{u}_1>0$ is a sup-solution of (4.1)', but really should say '...of (4.10)'.** **4. In page 9 says 'It follows that $\underline{u}$ is a super-solution of (4.1)'. There should say 'It follows that $\underline{u}$ is a subsolution of (4.1)'.** **5. In page 4 says 'Now we introduce a sub-supersolution method with boundary restriction', but this is not correct, because the author only give a notion about that they consider a subsolution (supersolution respectively) of the problem. They do not introduce any method. They use the classical method of sub- and supersolutions. However, they should consider write a proof of the Lemma 2.1 that is cited in the manuscript as Theorem 9.5 in the book by Gilbarg and Trudinger, because this comparison result is very important in their arguments.**	

Optional/General comments	**Main results of this paper may be a little minor contribution to the problem in studying. Here a few reasons:** **1. They are a direct extension of recent results involving the Laplacian operator, but only a partial extension.** **2. The most interesting results of the paper that motivates this work are not taken into account and nothing is say about this. If an extension of the work by Ghergu is considered, this should be much more complete (i.e., prove all results, showing details only when differences appear and comments main changes), but another Theorem or Lemma extended from that work could mean writing another paper (I think that is not good). Therefore, I recommend strongly to the authors improve this paper mentioning differences between their result with the those by Ghergu (apart from saying that instead of the Laplacian operator they are considering the p-Laplacian operator now), remarking difficulties that arise; and also completing with the full extension of the results in that work.** **3. The introduction lacks proper motivations and are unappealing. Just to mention a few things:** **a) The work of Ahmed Mohamed quoted corresponds to weak solutions (and this work treats about strong solutions). The intention of the authors of this manuscript is not clear about the connection between that work and this.** **b) Authors mix results for unbounded domains with**	

	other in bounded domains, it seems that there are no differences in working in one or the other type of domain. **c) The problem (1.5) is mentioned in the manuscript as treated in a general domain, but it should really be a ball.** **d) Many works mentioned in the introduction are not properly discussed neither connected with the results obtained in this paper. Therefore, I recommend to the authors give a better motivation for this paper.** **4. I recommend to the authors improve the english of this version.** **5. The bibliography contains information that are not well written. [For example, in [3] says Justino Sénchez instead of Justino Sánchez; in [10] says Josévaldo Goncalves instead of José Valdo Goncalves; in [10] says Carlo Alberto P.santos instead of Carlos Alberto P. Santos; in [19] says Marcelo Montenergo instead of Marcelo Montenegro. Also in [9] says 'Elliptic and asymptotic…' instead of 'Existence and asymptotic…'; in [17] says '…problems' instead of 'problem'; in [22] says 'Nonlinaer' instead 'Nonlinear']** **Finally, I think that the work can be reconsidered after improving that which has been mentioned above..**	

Note: Anonymous Reviewer