ADDENDUM: "TRIVIAL INTERSECTION OF BLOCKS AND NILPOTENT SUBGROUPS"

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The authors of [2] informed us that in the reduction step (1) of ([1], Theorem 1.4) there is a missing argument to see that G has a Hall $\{p, q\}$-subgroup. They pointed out that this gap may be closed by the following argument which also will appear in [2].

By induction, G/N and G/M have nilpotent subgroups. Thus, according to ([3], Corollary 8), $G = G/(N \cap M)$ has a Hall $\{p, q\}$-subgroup, say H. By Wielandt's Theorem [4], H is contained a Hall $\{p, q\}$-subgroup of $G/N \times G/M$, which is nilpotent. Therefore H is a nilpotent Hall $\{p, q\}$-subgroup of G.

References

[1] Y. Liu, W. Willems, H. Xiong and J. Zhang, Trivial intersection of blocks and nilpotent subgroups, *J. Algebra* **559** (2020), 510-528.

[2] G. Navarro, N. Rizo and A. A. Schaeffer-Fry, On the trivial intersection block conjecture, to appear.

[3] D. O. Revin and E. P. Vdovin, An existence criterion for Hall subgroups of finite groups, *J. Group Theory* **14** (2011), 93-101.

[4] H. Wielandt, Zum Satz von Sylow, *Math. Z.* **60** (1954), 407-408.