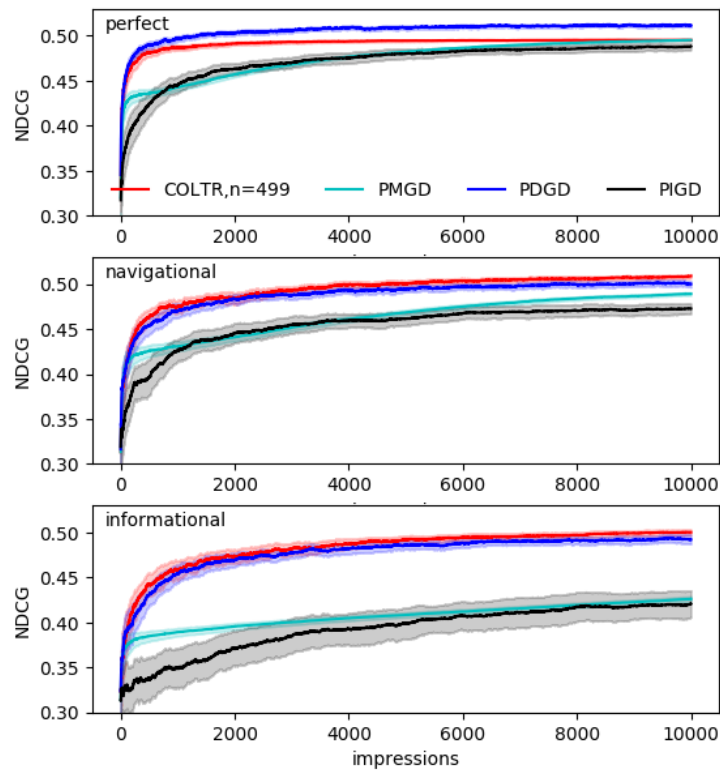
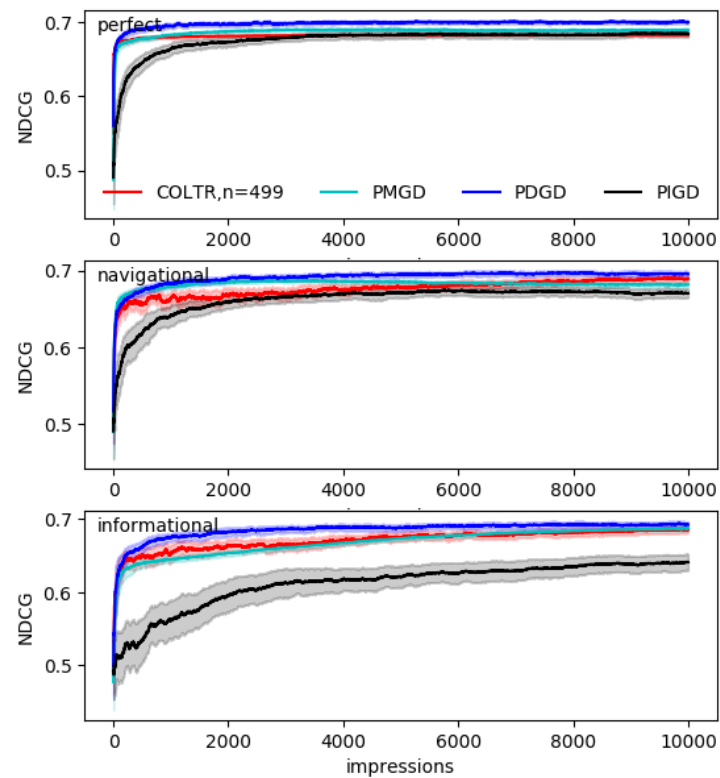


Appendix: Offline performance under three different click models for MQ2007, MQ2008, MSLR-WEB10k and Yahoo!, the shaded areas indicate the standard deviation.

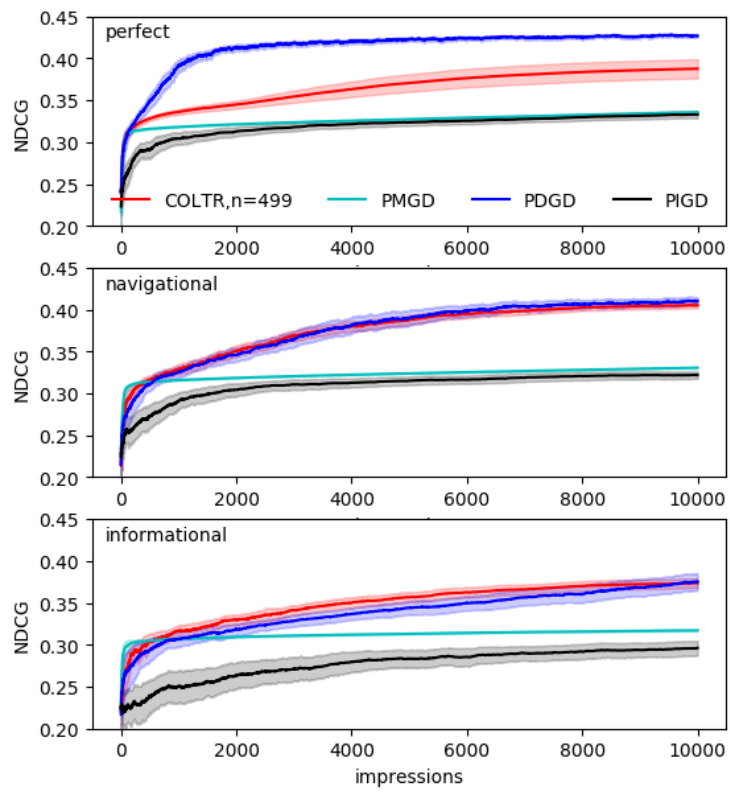
MQ2007



MQ2008



MSLR-WEB10k



Yahoo!

