Let $a > 1$ be an integer. Denote by $l_a(p)$ the multiplicative order of $a$ modulo primes $p$. We prove that if \( \frac{x}{\log x \log \log x} = o(y) \), then
\[
\frac{1}{y} \sum_{a \leq y} \sum_{p \leq x} \frac{1}{l_a(p)} = \log x + C \log \log x + O \left( \frac{x}{y \log \log x} \right)
\]
which is an improvement over a theorem by Felix [?].

Additionally, we also prove two other average results:

If \( \log^2 x = o(\psi(x)) \) and \( x^{1-\delta} \log^3 x = o(y) \), then
\[
\frac{1}{y} \sum_{a < y} \sum_{p < x} l_a(p) > \pi(x) + O \left( \frac{x \log x}{\psi(x)} \right) + O \left( \frac{x^{2-\delta} \log^2 x}{y} \right).
\]

Furthermore, if \( x^{1-\delta} \log^3 x = o(y) \), then
\[
\frac{1}{y} \sum_{a < y} \sum_{p < x, \ p \nmid a} l_a(p) = c \text{Li}(x^2) + O \left( \frac{x^2}{\log A x} \right) + O \left( \frac{x^{3-\delta} \log^2 x}{y} \right)
\]
where
\[
c = \prod_p \left( 1 - \frac{p}{p^3 - 1} \right).
\]

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