7 Well Road
Hampstead N.W. 3
June 20 1922

Dear Professor Kelley

I think you have got the grip of the enclosed problem. Your method of proof is very nearly the same as mine & at any rate as good. I have been very busy recently with examinations, but should like to develop the result by making the conducted quantities not $X = S^{n}_{n-s}(x_p)$ & $Y = S^{n}_{n-s}(x_{p'})$ but $X = l\, S^{n}_{n-s}(x_p) + m\, S^{n}_{n-s}(x_{p'})$

$$Y = m' S^{n}_{n-s}(x_{p'}) + l' S^{n+n'}_{n}(x_{p''})$$

the x_p, $x_{p'}$ & $x_{p''}$ being given in the same manners. This to follow up our talk of a day or two ago

and see how constants like the m
m' and l' would give a different
correlation between X & Y to that
reached by changing the size
of S.

Yours very sincerely,
Karl Pearson.