Answer on Question #78905 – Math – Calculus

$$\frac{d}{dx}\int_{x^2}^{0}\sin t^2\,dt=\frac{d}{dx}\left(-\int_{0}^{x^2}\sin t^2\,dt\right)=-\frac{d}{dx}\int_{0}^{x^2}\sin t^2\,dt=-\sin(x^2)^2\cdot(x^2)'=-2x\sin x^4\neq-\sin x^2$$

Thus, the statement is false.