
Born to Italian American parents, Croce grew up in Philadelphia. In 1965 he graduated from Villanova University with a bachelor's degree in psychology. Croce did not take music seriously until he studied at Villanova, where he formed bands and performed at fraternity parties, coffee houses, and universities around Philadelphia. He released his first album, Facets, in 1966, with 500 copies pressed. The album was financed with a $500 ($3,884 in 2019 dollars) wedding gift from Croce's parents. His music career started to take off.

On September 20, 1973, Croce chartered a twin-engined propeller aircraft from Natchitoches, Louisiana to Austin College in Sherman, Texas, as part of a concert tour. The plane crashed on takeoff and killed all 6 people on board including Jim Croce and musician Maury Muehleisen. Croce was 30 years old.