

## Social Pressure Theory (SPT): A New and Predictive Theory of Sexual Orientation, with Mathematical and Computational Models

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### Abstract

We present a new and predictive theory of sexual orientation – Social Pressure Theory (SPT) – that can be stated as follows: Same-sex (SS) and opposite-sex (OS) sexual inclinations in human beings are (a) independent of each other, (b) coexist in individuals in different proportions, and (c) will be roughly normally distributed in a population in which no social pressure exists to push people toward SS or OS inclinations. When net social pressure favors one inclination, the normal distribution becomes skewed as it drives people toward that inclination. At some point, the normal curve appears to break, resulting in a bimodal distribution in which a large mode exists at one end of the distribution (OS, in modern society) and a smaller mode exists at the other end of the distribution (SS). This creates the impression that two types of sexual orientation exist – or even, to some, the impression that two types of *people* exist – but the second mode is simply an artifact of social pressure. It consists of people who are able to resist social pressure. We also present a mathematical representation of this theory that predicts the prevalence of non-heterosexuality in different cultures as a function of heteronormative pressure in those cultures. According to SPT, the sexual orientation distribution results from a linear combination of two sinh-arcsinh distributions at certain mixture rates. We show graphically how the MSO distribution becomes increasingly distorted and finally breaks as social pressure ( $S$ ) increases. Although social pressure in the modern world almost universally pushes the curve toward the OS end of the continuum, the model suggests that pressure toward the SS end of the continuum will produce symmetrical changes. The vision of a world in which only SS inclinations are acceptable – in some instances as a means of limiting population growth – has been explored over the last 50 years in short stories, books, and movies. The predictive and symmetrical nature of the theory can be explored using a computational implementation of the SPT equations. Written in Python, it is now available for public use at Github.com.