Blaise Pascal lived during the mid 1600's and was the inventor of the first mechanical adding machine. He developed the modern probability theory, and believed that reason can neither prove nor disprove the existence of God.

In his wager, Pascal argued that the expected utility of believing in God far outweighs the expected utility of not believing in God. And because of these facts, everyone has a good reason to believe in God.

For example, believing in God comes with positive consequences, like leading a moral and just life and going to heaven. If God does not exist, but you still choose to believe in him, at least you have led a moral and just life. The same can be argued for the alternative- if you do not believe in God, you will go to hell if he does turn out to exist (even if you lead a moral and just life). This is why Pascal believed that everyone has a good reason to believe in God.

Choosing to believe in God based on the positive consequences is an either-or fallacy. Because if you believe in God based on the consequences rather than on true, genuine beliefs, then you basically believe that he does not exist.

This is a violation of the probability law because, for example, just because something is "true to me" does not mean that it is actually "true". I can believe in and out that the sky is purple, but that does not make it purple. Same goes for the belief in God. If I believe in God with everything I can, it still does not make him exist or prove that he exists.