

## He Has His Fathers Nose...

"You have your dad's eye's", "your mums smile", "and your grandfather's ears"... We've all heard comments such as these; but do they have any basis in fact when attempting to assert paternity? As a leading DNA testing company dealing with hundreds of paternity cases every year, these types of comments often are posed to us. These are generally by associated adults (parents and grandparents) who wish to emphasise a connection with a particular child. But can physical resemblances or indeed personality similarities be a reliable indicator of a biological relationship or is it just a case of "seeing what we want to see"?

Upon the arrival of a new born baby or seeing a young child out with a parent, family and friends will often instinctively mention resemblances between parent and child. This deeply engrained "social mirror" enables parents to rely upon the resemblances seen by others as a reassurance of parenthood. It leads to varying degrees of parental investment: the expenditure and resources parents invest in their offspring to ensure their survival and success, which can often be at the cost of their own reproductive success.

First to note is that this is not a new approach to the paternity issue. Questions of "likeness" amongst kin were considered by Pythagoras, Plato and Aristotle; the latter first noted bilateral heredity (that characteristics can come from mother and father) and interestingly, that characteristics could also skip a generation. These likenesses between parent and offspring help to reaffirm parental certainty, the degree to which you believe you and your child to be biologically related.

In general, mothers are more certain of paternity than are fathers. Before the advent of paternity testing (historically using blood typing through to today's sophisticated and highly accurate DNA testing), alleged fathers could only rely upon the social mirror to establish paternity, which of course is fraught with potential arguments and doubts. Mothers, in general, are keen to affirm the social mirror, whereas fathers are programmed to question it.

In order to establish parenthood using the social mirror, fathers must rely upon the faithfulness of the mother. As a result, fathers tend to place credence upon the physical likenesses and behavioural similarities that they believe they share with their child to affirm their biological relationship. These claimed resemblances impact the father's parental investment decisions, as he is more likely to invest in a child to whom he believes he is genetically related or with whom he shares similar characteristics.

Mothers are less dependent on physical cues as an indicator of biological relatedness as in general, they do not need to be convinced of maternity. Instead, mothers tend to notice psychological similarities with their child such as likenesses in personality and are inclined to use family resemblances to their own evolutionary advantage. They may example, use the presumed likenesses and similarities between alleged father and child to reinforce discussions surrounding paternal certainty. These claimed resemblances then serve to persuade the father of parenthood, which in turn ensures paternal investment for the child, thus increasing both the child's chances of success (vs. peers) and the mother's



reproductive success. Unfortunately, this also has undesirable consequences for the male who has been cuckolded into raising another man's child since it has the effect of reducing or indeed eradicating, their own genes from the gene pool.

This issue has never been more alive than it is today, as there has been a shift from social affirmation to social non-affirmation largely as a result of the use of social media. For example, comments posted on Facebook make the social non-affirmation very public, whereas before the advent of social media it was more likely contained to a close group of friends or family. This public display of clues to either paternity or non-paternity has the effect of raising the stakes for mother, alleged father, rival males and associated social destabilisers (who may have a variety of motives). To gain certainty and quell rumours, individuals often turn to a DNA test as the only means of delivering parental certainty.

The question of paternity may then spill over into the legal/social services sphere as a tactic in family disputes, where one or more party is trying to reduce their responsibilities or undermine another's position with respect to parental investment or indeed, vice versa. "More or less" parental investment is a key driver in the resolution of the dispute and a DNA based paternity test becomes a crucial piece of evidence providing clarity where only doubt existed before.

The social mirror in the context of today's society can be a dangerous weapon, but is one that can be effectively countered by use of an unequivocal paternity test from an accredited DNA testing company such as our own.

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