Your research demonstrates that red can induce an avoidance behaviour, and blue an approach motivation. You chose to study blue vs. red colours : meaning associations have been checked, and related significations found are reported as not surprising. Red : danger and mistake, blue : openness, peace. You omitted red : life, heart, prohibition, and Blue : freedom, cold.

So we can think that in both cases, the most dominant behaviour is : rejection of induced signification of each colour.

I wanted to point out some specificities of your study :

1. as you work with colours, one single colour is **never used alone**, and the human vision and brain works especially with contrast, to extract shapes and identify what you see. Thus, playing with HSV is necessary and difficult, because colour influence is non-conscious.
2. along experiments, both colours were used in two ways :
   [A] Foreground (study 4) : 'puzzle' pieces appear red or blue, so participants have to handle directly elements that are geometrical figures, meaningfull themselves. These significations can be consistent with their color (related to associations previously described) or not congruent at all.
   [B] Screen background : it looks like a square, a geometrical figure with a meaning of **fixedness**, or like a framework with wide sides, which main signification is : **limit** .

   Therefore the colour is linked to a shape that is itself meaningfull, and creates a cognitive bias.

Then, as described above, colour is managed through the 6 experiments regardless to the typical parameters of the ***sign***, which are defined by semiotics.

The parameters are :

a) shape : either a geometrical figure or an *iconic* element, shape is meaningfull, not only for the consciousness -relating to *iconic* signs, but also for non-conscious perception -rather related to *plastic* signs. This part of global vision is strongly efficient and remains activ for a long time after the sensory perception.

b) position : anywhere in what Kandinsky called the « plan originel», from focal to peripheral perception. Position is meaningfull, particularly whitin geometrical figures.

c) proportion : that is : relative to other elements. Correlated to point 1 above, with foreground/background balance.

d) global surface : that is : absolute dimension of vision perception, depends on distance where you observe the visual. Nearby a monochrome-painted wall, or 3 meters distant from a small picture are perceptive experiences that are obviously very different, due to peripheral perception.

Following this set of parameters, if the red colour -for instance some spots with a neutral background (maybe blue?!)- has been associated as « full of life », would rejection behaviour appear, and thus inducing an avoidance motivation ? Or the opposite ?

Therefore, I personnaly don't feel as an evidence to assert in a generic manner that red (vs. blue) induces an avoidance (vs. approach) motivation, because of its close relation to the manner colours are displayed.

But a very interesting subject is underlying in your results. Indeed, a « reject threshold » -that is : the way the colours appear in visuals-, involves a reaction, a behaviour which seems to be opposed to the basic meaning of this specific colour. Unfortunately this study would be very complex, because of the number of parameters, although these are independent from each others.

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