

develop. In order to examine the development of hand preference and performance abilities, a cross-sectional sample of 548 children (ages 3–18) and adults (over 19) completed the Waterloo Handedness Questionnaire, the WatHand Cabinet Test (an observational test of hand preference), and the Annett pegboard. Findings revealed that while the direction of hand preference does not change significantly with age, the degree of hand preference does, such that younger children exhibit weaker hand preference than older children and adults. This pattern of hand preference was much more evident for left-handed individuals, where consistent hand preference was not seen until 8 years of age. Similarly, performance differences between the hands did not emerge for left-handers until later childhood, while in comparison large performance differences were seen for right-handers at all ages. The implications for the development of handedness will be discussed.

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#### The lighter side of advertising

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Lighting position provides our visual system with important perceptual information that allows the viewer to interpret natural scenes and perceive the 3D shape of objects. The human visual system typically assumes that there is a solitary light source from above or to the left of centre. Portrait artists display a similar leftward bias with the majority of paintings exhibiting light sources from the left. The current investigation examined modern print advertisements for similar biases in lighting direction. A total of 2486 full-page advertisements featuring only person were sampled from a variety of current magazines. Results indicated a significant lighting bias ( $t(2485) = 7.942, p < .001$ ) illustrating that more advertisements were lit from the left side (46%) than the right (32%). This finding is consistent with past research on lighting preference and biases in portraiture. Interestingly, a trend was observed indicating the lighting bias was affected by which side of the magazine the advertisement was displayed on ( $F(1, 2474) = 3.544, p = .060$ ). Indicating that advertisements presented on the right side of the magazine demonstrated a larger left bias (49%) than those presented on the left side of the magazine (45%). However it is important to note that both left and right page ads display a left lighting

bias. Using print advertisements the current investigation further demonstrates an overall preference for left-lit images. The observed bias toward leftward lighting could be a reflection of right hemisphere dominance for judgments of brightness and lighting position.

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#### Do patients with schizophrenia attribute intention and belief in a referential communication task?

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Many studies have reported that patients with schizophrenia (SZ) can be impaired in social cognition, implying communication disorders and theory of mind (ToM) deficits. However, classical tasks used to assess impairment in ToM ability are complex and McCabe et al. suggested that in real life conversations SZ patients were able to attribute mental states (e.g. intention, belief) to achieve successful communication. The aim of this study was to determine Theory of mind deficits using both a classical task and an ecological task such as a referential communication task. Indeed, with the referential communication paradigm, a “natural” situation of conversation is reproduced in order to evaluate how SZ participants take into account or fail to take into account existing knowledge that is shared with the experimenter. Thirty patients with schizophrenia and thirty matched healthy participants—all right handed and native French speakers—were tested individually on a referential communication task, on a standard ToM task and on their executive functions (inhibition, flexibility, fluency). Main results showed a lack of flexibility and difficulties to process intention and belief in both ToM tasks in SZ patients. Contrary to healthy participants, they exhibited a tendency to ineffectively mark the information they use (indefinite pronouns for old information and/or definite pronouns for new information), and had problem to use shared information with experimenter.

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