A thin slice perspective on the accuracy of first impressions

* The accuracy of first impressions was examined by investigating judged construct (negative affect, positive affect, the Big Five personality variables, intelligence), exposure time (5, 20, 45, 60, and 300s), and slice location (beginning, middle, end). 334 judges rated 30 targets. Accuracy was defined as the correlation between a judge’s ratings ad the target’s criterion scores on the same construct. Negative affect, extraversion, conscientiousness, and intelligence were judged moderately well after 5-s exposures; however, positive affect, neuroticism, openness, and agreeableness required more exposure time to achieve similar levels of accuracy.
* Overall accuracy increased with exposure time, judgements were based on later segments of the 5min interactions were more accurate, and 60s yielded the optimal ration between accuracy and slice length. Results suggest that accuracy of first impressions depends on the type of judgement made, amount of exposure, and temporal location of the slice of judged social behaviour.
* The term “thin slices” has been used to describe short excerpts of social behaviour from which perceivers can draw inferences about states, traits, and other personally-relevant characteristics (Ambady & Rosenthal, 1992; Ambady, Bernieri & Richeson, 2000) and is an approach that is well suited for studying the accuracy of first impressions.
* In the current we will use thin slice approach to study when first impressions are right and wrong, and examine the amount of exposure that judges need to increase the likelihood of producing an accurate judgement.
* Here, we address four issues:
  + Previous empirical studies have not fully investigated the impact of slice “thickness” (id length) on accuracy across a range of constructs
  + Little is known about how the location of a slice within a behavioural stream might influence judges’ accuracy about target individuals
  + It is not known to what extent accuracy may differ according to the construct being judged. Thus far, no single research has investigated differences in accuracy for emotions, personality, and cognitive ability
  + The stimuli presented to judges for evaluation have been highly variable from study to study
* The realistic accuracy model (RAM; Funder, 2001) and the weighted average model (WAM; Kenny, 1994) both describe when and how accuracy is achieved in person perception. . These models agree that judgemental accuracy should increase as the amount of available information increases , suggesting that accuracy should be greater for “thicker” slices
* There are two operational indicators of accuracy: agreement and prediction. Agreement is the match between a thin-slice judgement and a criterion where both are measured on the same content
* Broad statements about accuracy that do not distinguish larger from smaller effects are also problematic
* The meta-analysis of Ambady & Rosenthal (1992) found that across 38 studies of thin-slice accuracy, there was no linear increase in correlations from slices of under 30s to slices of 300s in length
* Evolutionary, or functional, approach to emotion (eg Izard, 1991) that emphasizes the adaptive value of recognizing others’ emotional states. In addition, research has demonstrated that skin conductance responses can be elicited in response to subliminally presented faces expressing negative affect, but not positive affect (Esteves, Dimberg, & Oehman, 1994)
* Easiest traits to judge – extraversion, conscientiousness, and agreeableness (Funder & sneed, 1993; Borkenau 7 Liebler, 1993). The most difficult personality factors to judge are neuroticism and openness to experience (Borkenau & Liebler, 1993), presumably because there are few or conflicting behavioural cues (Funder & Sneed, 1993).
* We predicted that judges would be most accurate when judging extraversion and conscientiousness, with some accuracy for agreeableness, and relatively less accuracy for neuroticism and openness. Specifically, it was predicted that the personality constructs deemed most easily judged in previous research (extraversion and conscientiousness) would be most easily judged at the shortest time lengths (eg 5s), and would be the least likely to benefit dramatically from increases in exposure time. In contrast, neuroticism and openness were not expected to be accurately judged at the shortest time lengths and should benefit the most from an increase in exposure length.
* Research on the accuracy of intelligence judgements has not used slices any shorter than 1 min in duration. Reynolds & Gifford (2001) and Murphy et al (1993) found significant accuracy with slices of this length, as did Borkenau & Liebler (1993) with 90-s exposures. However, Zebrowitz et al (2002), in a meta-analysis of earlier studies as well as in a new study, found significant accuracy for judging intelligence from facial photographs. We though it possible, therefore, that even our shortest exposures would contain enough information for intelligence to be judged better than chance.
* Accuracy research often demonstrates that female judges are more accurate than male judges, particularly when judging emotions (see meta0analyses by Hall, 1978, 1984; and McClure, 2000). Women’s greater accuracy has also been observed for judgements of personality traits and intelligence (Ambady, Hallahan, & Rosenthal, 1995; Lippa & Dietz, 2000; Murohy et al, 2003; Vogt & Colvin, 2003). Overall, past research suggests that women may be more accurate than men on all the constructs we assessed in the current study.
* Trained coders evaluated the videotaped social behaviour of each target using the Riverside Behavioural Q-set (RBQ; Funder, Furr & Colvin, 2000). Of the 64 RBQ items, nine behaviours describe positive affect (appears to be relaxed and comfortable, laughs frequently, smiles frequently, shows high enthusiasm, expresses sympathy, expresses warmth, seems to enjoy interaction, behaves in a cheerful manner, and acts playful) and 10 behaviours describe negative affect (is reserved and unexpressive, shows physical signs of tension, acts irritated, expresses hostility, behaves in a timid or fearful manner, expresses guilt, says negative things about self, blames others, expresses self pity, and seems detached from the interaction)
* The Big Five factors of neuroticism, extraversion, openness, agreeableness, and conscientiousness were calculated for each target by using an average of self report, peer report, and parent reports on the NEO-PI-R (Costa & McCrae, 1992; peer and parent reports are further described in Vogt & Colvin, 2003). Intelligence was measured with the Wonderlic personnel test (Wonderlic, 1984), a 12-min 50-item measure that is highly correlated with established IQ tests (Dodrill, 1983).
* Discussion. There was a positive relationship between exposure time and accuracy for the aggregated set of variables. However, slice length (ie exposure time) mattered most for the three variables: positive affect, extraversion, and agreeableness. For each of these three variables, accuracy at 5s was significantly lower than accuracy at longer exposures. There was a significant linear effect of slice length on accuracy fir extraversion and agreeableness. These results seem to suggest that more information yields more accuracy particularly for constructs related to positive affect and social approach.. In contrast, increased exposure time was unrelated to accuracy when judging negative affect, neuroticism, openness, and intelligence – accuracy was no different at 5s than at 300s. Judgements of conscientiousness exhibited a linear increase in accuracy with greater slice length, but the difference between 5 and 300s was not statistically significant. Overall, it might be argued that these five variables fall into the two categories of negative affect or threat, and intelligence or competence. Quick and accurate judgements of theses behavioural categories may be both life-saving and life-promoting.
* The slices from the middle and the end of behavioural stream produced the greatest accuracy for 6 of 8 variables (the exception were neuroticism and agreeableness). Overall, accuracy was highest for slices extracted from the third minute of the 5 min interaction. Considerable accuracy was also observed for slices extracted from the fifth min, whereas accuracy for the first min was much lower.
* Thin-slice judgements for extraversion exhibited the greatest accuracy, followed by negative affect, conscientiousness, IQ, neuroticism, positive affect, openness, and agreeableness (for which accuracy was significantly lower than all other variables).
* Women’s judgements of targets, across all 8 constructs, were significantly more accurate than men’s judgements of targets. Women were significantly or marginally more accurate on openness, intelligence (eg Murphy et al 2003), and negative affect. Women and men did not differ in accuracy on neuroticism, extraversion, or positive affect (Lippa & Dietz, 2000)
* The strength of the study is that we evaluated accuracy in the emotion, personality, and intelligence domains.