Title: Issues of validity: Exploring the link between values and behaviour.

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Abstract

The way we measure values is foundational to their study. This paper explores the empirical findings and theoretical discussions in the literature concerning an essential quality for any measure of values, its validity. We discuss an important debate on validity within the literature concerning the ability of value measures to predict value-related behaviour. We interrogate a key assumption behind the value-behaviour link, namely that a participant's responses on a valid value measure will predict their behaviour. Ultimately, we make the case that a better understanding of the relationship between values and behaviour may be possible if we also consider social norms.

The way we measure values is foundational to both their study and use in education. Value measures are widely used in character research, leading some commentators to speculate that this has directed the evolution of our conceptions of values along lines that can more readily be measured (Siegel, 2014). Value measures are similarly important in character education: either in establishing the efficacy of any character education programme (Kristjánsson, 2015), or as part of the character education process, enabling the programme coordinators to fine-tune their methods and focus on 'what works' (Arthur et al., 2014). Behind all of these uses for value measures lies the question of validity, an essential quality for any measure, denoting the extent to which it is measuring what it claims to measure. Character researchers and educators will regularly attempt to validate their measures, such as the statistical tests of validity utilized by those who employ quantitative value measures. However effective they may be, such validity testing methods are typically unable to interrogate the underlying assumptions concerning validity which exist within all value measures.

Consequently, this paper will explore literature relating to one of the key underlying assumptions behind the validity of any value measure, that a participants' responses on the measure should accurately predict their behaviour (predictive validity; Salkind, 2010). In our structured review of the literature, we aim to explore how this assumption of a predictive link between value measure responses and behaviours has been theoretically conceptualised and empirically evaluated, seeking whatever insights these empirical findings can offer regarding both our approach to measuring values and, consequently, the use of value measures in character education and research.

Validity and the value-behaviour link

The assumption that a valid measure of values will predict future value-related behaviour (predictive validity) is predicated on the underlying assumption of a consistent relationship between values and behaviour. It is a common feature of almost all definitions of values to mention the relationship between values and behavior (Schwartz and Bilsky, 1987a). One contested issue regarding this relationship is whether it is predictive or causal. Many researchers believe that the relationship is merely predictive, often due to the correlational nature of their research design (Aguilar-Luzón et al., 2012). Others see the relationship as causal, with values influencing behaviours (Hitlin and Paliavin, 2004; Caprara and Steca,

2007). The assumption of a predictive relationship between values and behaviour is critical to researchers, as it often forms the basis of determinations of validity for the value measures they use in their research (Davison et al., 2016). Indeed, any measures whose value scores do not predict the value-relevant behaviour of the individuals who complete them are seen as having questionable validity. The assumption of a causal relationship is particularly prevalent among educators who employ values in their practice. An example of this would be character education, where the aim is to impact behaviour by changing values through education (McTernan, 2014). Without a causal relationship, it is hard to see what purpose character education would serve. Indeed, the success or failure of a character education program can hinge on its perceived impact on the behaviour of those who complete the program (Kristjánsson, 2015). Of course, in order to conclusively attribute the change in behaviour to the character education elements of the course, it is often necessary to demonstrate a corresponding change in the values of the students. Consequently, value measures are widely used to determine the extent of the change brought about by character education (Babeau 2002). Babeau sees value measures as an essential tool for assessing the impact of any course or curriculum which claims to promote moral development and is an advocate for their widespread use in that role.

The explanations as to why people behave in accordance with their values include the suggestion that values act as guides to evaluating our behaviour (Caprara et al, 2017), making the correspondence between values and behaviours a product of this use of values to make key behavioural decisions. Another perspective is offered by Blasi (1983), who proposed that we have an innate desire to act in a manner which is consistent with our values. Lönnqvist, Verkasalo, Wichardt and Walkowitz (2013) appear to elaborate on Blasi's claim by proposing that we engage in value-consistent behaviour in order to express those values. An example of this would be an individual who engages in pro-social behaviour in order to demonstrate and endorse those values to themselves and others (Eisenberg et al. 2006). The importance of this discussion regarding the theoretical reasons for the relationship between values and behaviour is that the different perspectives offer different avenues of exploration for future research. For example, the 'value expressive' perspective suggests that the value-behaviour relationship may be influenced by the extent to which behaviour is known to others, thus connecting with group dynamics and social norms.

There is a wide selection of research which has attempted to verify the value-behaviour link empirically; however, the findings have been equivocal (Bardi and Schwartz, 2003). On the one hand are the studies which have found a significant relationship between values and behaviour in areas such as voting (Caprara et al., 2017), selection of studies (Sagiv et al., 2017; Bardi et al., 2014), creativity (Taylor and Kaufman, 2020), academic achievement (Tough, 2013) and career choice (Sagiv and Schwartz, 2002), among others. One area in particular where behaviour has consistently been linked to values by a number of researchers is pro-social behaviour (Caprara and Steca, 2007; Schwartz, 2010; Schwartz et al. 2017). However, on the other hand are those studies that were unable to find a relationship between values and behaviour (Kristiansen and Hotte, 1996; McClelland, 1985; Bardi and Schwartz, 2003) or that only find a weak relationship (Berkowitz and Bier, 2006). Furthermore, in their review of research on the value-behaviour link in relation to moral values, Kristjánsson (2015) found that there was limited evidence of a reliable relationship between moral values and moral behaviour.

The difficulty in establishing a consistent relationship between measurements of values or moral judgments and behaviour is nothing new, and can be traced back at least as far as Blasi's (1980,1983) critique of Kohlberg. Blasi argued that moral reasoning only explained a relatively small amount of the variance in moral behaviour, with the unexplained variance implying other factors beyond reasoning which also influenced that behaviour. For some, it is moral emotions such as empathy and sympathy which explain some of that variance (Batson, 1998; Hoffman, 2000). To others, it is moral identity that is the missing component (Blasi, 1983; Gibbs, 2003; Hardy and Carlo, 2006). Attempts to incorporate some or all of these elements into a single model has led to the development of a series of multi-component models. One of the first of the multi-component models is Blasi's (1980, 1983) Self-Model of moral functioning, which contained three components: Judgment of responsibility (awareness of ethical issues), moral identity (centrality of moral values to identity) and self-consistency (motivation). Around the same time Rest (1982) proposed the Four Component Model (FCM) which also considers moral sensitivity (awareness of ethical issues), moral motivation (centrality of moral values to identity). Rest's model was similar to Blasi's, but additionally included moral reasoning and moral character (willpower and determination) as the third and fourth components. More recently, Darnell, Gulliford, Kristjánsson and Paris (2015) developed their 'Phronesis' model which has four components. While the first two, constitutive function (awareness of ethical issues) and integrative function (moral reasoning), correspond to two of Rest's components,

the third and fourth, blueprint (conception of moral living) and emotional regulation (integration of emotions and rational judgment), are more original elements of the Phronesis model. While these different models may disagree on the exact combination of elements necessary, there are recurring elements, such as 'moral identity' being represented as a series of values. Furthermore, they all appear to agree that a multi-factor approach is necessary if we wish to understand moral behaviour.

One factor which has not been as widely considered in terms of its impact on the relationship between values and behaviour is social norms. Indeed, one critique of Blasi's model is that it doesn't consider the relationship between context and identity (Doris, 2002). In the concept 'moral situationism' Doris proposed that moral behavior could be influenced as much by situational factors as moral reasoning. In terms of which aspect of the situation might be most influential, Babeau (2002) suggested that researchers should consider how norms and culture might influence moral behaviour. Given that the concept of 'social norms' is more associated with research in the area of social psychology than with character research, we first need to discuss the nature of the concept before exploring its potential relevance to the value-behaviour link.

The concept of a 'social norm', originating in research on the impact of group membership on the behaviour of group members (Sherif, 1936), represents the expectations of the group regarding its members. These expectations can range from expected behaviours and appearance, to expected beliefs, attitudes and values (Asch, 1951; Lönnqvist et al., 2009). Adherence to the social norms of the group, known as conformity, is a condition of group membership, and members who disregard the group's social norms risk censure or expulsion (Schwartz, 1977). Members may come to identify with certain groups, such as their peer group (Kuczynski et al. 1997), society (Boehnke, 2001) or cultural group (Shteynberg et al., 2009; Chan and Tam, 2016), to such a degree they internalize the social norms of the group (Tajfel 1974), adopting normative beliefs, attitudes and values as their own (Rand et al., 2014b). Incompatibility between an individual's values and group social norms can result in stress and fear of exclusion due to non-conformity (Triandis, 1990; Sagiv and Schwartz, 2000; Pagliaro et al., 2011).

With regard to how social norms might influence the relationship between values and behaviour, Rest (1982) had indirectly recognised the impact that social norms might have in

the moral motivation dimension of the FCM by acknowledging that social consequences could play a part in our motivation to engage in moral behaviour. In simple terms, if engaging in a behaviour which is consistent with our values might lead to our condemnation or rejection by our social group, we would be less likely to do it. This is consistent with the findings of Oja (1984) who studied collaborative behaviour in teachers and argued that social expectations explained the teacher's behaviour when it was inconsistent with their moral reasoning. Conversely, Bardi and Schwartz (2003) found the reverse was also true, in that the value-behaviour relationship was strongest in those behaviours which had no strong social normative pressure related to them.

Another concept which has been known to be related to values and behaviour is self-efficacy. Self-efficacy refers to an individual's level of confidence in their own abilities (Bandura, 1986). An individual can have multiple levels of self-efficacy, each associated with a different type of behaviour. According to Bandura, self-efficacy represents our confidence that we can successfully execute that behaviour, making us more likely to engage in behaviours where we have high self-efficacy and thus a perceived higher chance of success. This relates to the value-behaviour link, as our decision to engage in a behaviour, in order to express a related value, may depend on our self-efficacy beliefs that we can execute that behaviour successfully (Caprara et al., 2012). Studies have found self-efficacy beliefs mediating the relationship between prosocial values and prosocial behaviour (Caprara et al., 2012), creativity (Tep et al., 2021), as well as panic buying and social distancing during the COVID 19 pandemic (Tabernero, Castillo-Mayén, Luque and Cuadrado, 2020).

Values and the Theory of Planned Behaviour

Based on the literature we have discussed, we would propose that a model which seeks to explain the value-behaviour link would benefit from incorporating norms and self-efficacy. One model which incorporates many of these elements already is the Theory of Planned Behaviour (TPB, Ajzen, 1991), which proposes that attitudes, social norms and self-efficacy combine to produce behavioural intentions and these in turn influence behaviour, while also allowing for self-efficacy to directly influence behaviour. While the TPB model has been widely used in the field of cognitive psychology to study the relationship between attitudes and

a wide variety of behaviours some studies, which have looked at the relationship between attitudes and moral behaviour, have found the TPB outperforms other models attempting to explain the relationship between values and those behaviours. For example, Aguilar-Luzón et al. (2012) found the TPB to be a better predictor of recycling behaviour than Stern et al.'s (1999) value—belief—norm (VBN) model.

Given its effectiveness in predicting the attitude-behaviour link, we looked for indicators in the research as to how values might be integrated into the TPB model. We've already considered how values relate to norms and self-efficacy, and so what remained was to consider the relationship between values and attitudes. There are several studies which suggest that values predict attitudes (Stern et al., 1995; Lebedeva and Schmidt, 2012), including one study, by Oreg and Katz-Gerro (2006) which linked cultural values (harmony and post-materialism) to attitudes, then onward to behavioural intentions, before finally linking to behaviour on environmental issues. What all this research suggests is that values act as a precursor to attitudes, and alongside the research we had previously discussed, which linked values to social norms and self-efficacy, we can propose this expanded version of the TPB model to incorporate values.

<< Figure 1 goes here>>

Fig 1: Expanded TPB model incorporating values.

One question raise by this model is its relationship with the existing multi-dimensional models such as those by Rest or Blasi. Based on Blasi's (1995) conception of moral identity, as a collection of values of greater or lesser importance to the individual, we would see the values element of our model as corresponding to that concept. Moral reasoning then would be represented in our model as the process by which the general principles encapsulated in the values are first translated into more specific attitudes and hence into specific behaviours. This parallels the views of Hardy & Carlo (2006) who argued that moral identity and reasoning are the attitudes that influence our behavioural intentions. It's worth noting that in their review of the relationship between moral identity and behaviour, Rest and Carlo also propose that 'social pressures' and 'relevant skills' mediate that relationship, echoing the impact of social norms and self-efficacy elements in the TPB. As such the expanded TPB framework we are proposing is compatible with the existing multi-dimensional models. Our model is not an attempt to

replace or replicate those existing models, but rather work alongside them, adding the impact of social norms and self-efficacy in an effort to explain a different portion of the moral behaviour variance and thereby allowing for a more accurate prediction and understanding of that behaviour. We do acknowledge that this suggestion is derived, in large part, from research in an associated research tradition outside of the mainstream research on moral behaviour. However, the inclusion of a wider selection of literature, particularly from the areas of sociocognition and information processing, has been recommended by other researchers (Hardy & Carlo, 2006; Lapsley & Narvaez 2004) who feel that such literature can offer fresh perspectives which will inform the research into moral behaviour.

The next thing to consider is whether integrating values into the TPB model offers us a new perspective on the value-behaviour link. The expanded TPB model proposes that we should measure values, social norms and self-efficacy if we wish to be able to predict behaviour, as the individual elements might not have a relationship with behaviour, but a combination of all three could. This viewpoint is supported by the results of a study by Aguilar-Luzón et al. (2012) who found that while social norms did not predict environmental behaviours, behavioural intentions which combined social norms with attitudes and self-efficacy did predict them.

However, the relationship between values and social norms proposed by the expanded TPB model may be more complex than merely summing their individual contributions to behavioural intentions. Lönnqvist et al. (2006) found that conforming to norms can interfere with the relationship between values and behaviour. Bardi and Schwartz (2003) suggest that the stronger the link between social norms and behaviour, the weaker the link with values. Thus, the existing research suggests potential interference between norms and values in terms of their respective impact on behaviour, but the reasons why and when this interference might occur remain unclear. Incorporating social norms into our model for understanding the valuebehaviour link could shed some light on this. For example, it would enable us to identify those cases where values and norms are in conflict, causing the norms to disrupt the value-behaviour link. Furthermore, if we consider Lönnqvist et al's (2013) suggestion that we engage in valueconsistent behaviour in order to be value-expressive, it is possible that even largely compatible norms and values might still disrupt each other. For example, in those cases where both values and norms endorse the same behaviour, if the group norm is strong and widely known, we would argue that engaging in that behaviour is likely to be interpreted by others as conforming; declaring your adherence to the norm and membership of the group to which the norm is associated. Therefore, it may be the case that once the strength of a norm reaches a certain point, it will be the extent to which the individual wishes to be seen as a member of that group that determines their behaviour, rather than the centrality of the values they hold to their identity. As such, we propose that it may be useful to know the relative strength of the link between both values and social norms with behavioural intentions in order to be better able to say which one will be the predictor of our behavior.

Conclusions

Overall, regarding the issue of predictive validity our review suggests that values predict behaviour unless it is socially desirable to behave otherwise. This does not mean that we will choose to conform rather than adhere to our values every time, only that the pressure to conform will be higher where the social norms are stronger. Responding in a way that will elicit a positive social evaluation, typically by conforming to social norms, is often labeled 'social desirability' in a research context. This is not to be confused with the 'experimenter effect', where participants attempt to offer the response they think the researcher desires. Thus, if participants respond to a value measure in a socially desirable manner, rather than expressing their values, based on our review we argue that this is an accurate representation of what they may do in real life. This viewpoint offers a new perspective on the predictive validity of most value measures, especially with regard to the concern in certain corners over the perceived vulnerability to social desirability inherent to self-report value measures (Endicott, Bock and Narvaez, 2003; Kristjánsson, 2015). From the perspective of the expanded TPB, social desirability would not be seen as a flaw of self-report which needs to be eliminated, but rather a feature of the value-behaviour link which needs to be explored.

One potential method for achieving this is the suggestion that value measures could also measure the participants' perception of the social norms relating to the same issue. This would enable us to determine not only the impact of both values and norms on behaviour, but also to explore the relationship between perceived social norms and self-reported values. However, the suggested addition of values to the TPB would need to be extensively tested to establish its predictive validity. Additionally, as these suggestions rely on a combination of findings from psychological research and research on moral behaviour, a more complete theoretical

exploration of the intersection between the concepts of social norms, self-efficacy, attitudes and values is needed, as it is beyond the scope of this paper to fully map out. For example, future research could explore wider issues arising from this expanded model, such as how to resolve the relative impact of multiple social norms arising from the membership of more than one social group (Stryker & Stratham, 1985).

Finally, considering the relevance of these findings to character education, as Babeau (2002) argued, value measures are an essential tool for assessing the impact of any course or curriculum which claims to promote moral development. Thus, a better understanding of the value-behaviour link, which we believe can be achieved through the inclusion of social norms, should mean that these measures give us the more accurate image of the efficacy of any character education programme.

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