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## Psychological Essentialism, Implicit Theories, and Intergroup Relations

Nick Haslam, Brock Bastian, Paul Bain and Yoshihisa Kashima University of Melbourne

Research on implicit person theories shows that beliefs about the malleability of human attributes have important implications for social cognition, interpersonal behavior, and intergroup relations. We argue that these implications can be understood within the framework of psychological essentialism, which extends work on implicit theories in promising directions. We review evidence that immutability beliefs covary with a broader set of essentialist beliefs, and that these essentialist beliefs are associated with stereotyping and prejudice. We then present recent studies indicating that associations between implicit person theories and stereotyping may be explained in terms of essentialist beliefs, implying a significant role for these beliefs in the psychology of group perception. Finally, we propose ways in which research and theory on essentialist beliefs might clarify and advance research on implicit person theories.

KEYWORDS essentialism, lay theories, prejudice, stereotypes

RESEARCH on implicit person theories (IPTs; Levy, Plaks, Hong, Chiu, & Dweck, 2001) has demonstrated that beliefs about the nature of human attributes are critically important for cognition, motivation, and behavior. 'Entity theorists' and 'incremental theorists', who believe that attributes are fixed and malleable respectively, process information in distinctive ways that have profound implications. A vigorous program of research has established the role of IPTs about intelligence, morality (Chiu, Dweck, Tong, & Fu, 1997), and personality (Chiu, Hong, & Dweck, 1997; Gervey, Chiu, Hong, & Dweck, 1999) in a wide variety of cognitive and behavioral domains and with both children and adults.

Recent work on IPTs has investigated their role in stereotyping and intergroup relations. Levy et al. (2001) argued that entity theorists hold a static view of human nature that deeply affects how information about social groups is interpreted. Whereas entity theorists ascribe group members' behavior to static and decontextualized traits, incremental theorists interpret behavior in terms of dynamic psychological processes (e.g. goals, appraisals,

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motives) and the interpersonal and intergroup context. Consequently, entity theorists are especially prone to social stereotyping. In an influential study, Levy, Stroessner, and Dweck (1998) found that entity theorists made more stereotypical trait judgments of ethnic and occupational groups, made more extreme and rapid stereotypic judgments on the basis of limited information about novel groups, and attributed stereotyped traits more to innate group properties than did incremental theorists. In addition, entity theories predicted stereotype endorsement independently of several stereotype-relevant individual difference variables (e.g. right-wing authoritarianism, need for closure).

Later research has offered further support for the role of IPTs in intergroup relations. Plaks, Stroessner, Dweck, and Sherman (2001) showed that entity theorists pay greater attention to stereotype-consistent information than incremental theorists. Hong et al. (2004) demonstrated that people who hold entity theories about moral character display greater negative bias and prejudice toward maligned outgroups. Moreover, unlike incremental theorists, entity theorists did not display a reduction in bias towards these groups when an inclusive self-categorization (i.e. common ingroup identity) was held. In a similar vein, IPTs have been found to moderate social identification effects on self-conception and intergroup orientation (Hong et al., 2003). By implication, entity theorists are less susceptible to the influences of self-categorization and social context, believing that outgroup attributes are members' concrete immutable. Findings such as these demonstrate the many ways in which IPTs illuminate stereotyping and prejudice, and the extent to which they are stimulating original research.

Interest in the perceived fixedness of human attributes has not been the exclusive province of IPT research, however. Several theorists have argued that beliefs in the immutability of human attributes and social categories reflect a broad assumption about the nature of human difference. This 'essentialist' assumption ascribes a fixed, underlying nature to members

of a category, which is understood to determine their identity, explain their observable properties, render them fundamentally alike, and allow many inferences to be drawn about them. More formally, essentialism is a naive ontology positing that categories have a deep and unobservable reality, that this reality or 'essence' gives rise to the surface features of category members (i.e. 'dispositionism'), that it is unchanging and unchangeable by human intervention, and that it has a 'natural' basis. In the domain of social categories this causal basis may often be understood in a biological fashion. However, non-biological essences (e.g. spirits, souls) may also be imputed and research suggests that biological causal beliefs may not underpin essentialist thinking in some cultures (Kashima et al., 2005).

Research on 'psychological essentialism' (Medin & Ortony, 1989) began with early work on children's contrasting understandings of living kinds and human artifacts (Gelman, 2003), but in the past decade it has extended to adults' and children's understandings of social categories and personality traits. Recent work has documented essentialist thinking about a host of differences between people, including ethnicity (Gil-White, 2001), race (Hirschfeld, 1996), religion (Boyer, 1993), (Mahalingam, 2003), mental disorder (Haslam & Ernst, 2002), and personality characteristics (Giles, 2003; Haslam, Bastian & Bissett, 2004). This work has been notable for its theoretical and methodological diversity, representing positions that span cognitive psychology to critical theory, and methods that range from laboratory experiments to ethnography and discourse analysis.

Although this diversity of approach has at times left the meaning of essentialist beliefs somewhat obscure, there is substantial agreement that immutability beliefs are fundamental. In a seminal contribution, Rothbart and Taylor (1992) proposed that essentialist thinking about social categories amounted to a misapprehension of socially constructed groupings as 'natural kinds', and that it had two primary components. On the one hand, essentializing a social category involves

attributing 'inductive potential' to it. A person's membership in such a category is taken to be richly informative about them, just as knowing a creature's biological species affords many inferences about its behavior, internal structure, ecological niche, and so on. On the other hand, when a social category is essentialized it is also seen to be 'inalterable': membership in the category viewed as fixed and impermeable. The ascribed essence is changeless and therefore a source of continuity through time. Rothbart and Taylor's two-component model of essentialist thinking has been influential among researchers in the field, who frequently invoke their inalterability component as a core element of the construct.

If beliefs in the immutability of human attributes and social categories have been proposed as elements of an essentialist understanding of difference, they may illuminate research on IPTs. Entity theories can clearly be aligned with one component of essentialist thinking (cf. Brewer, Hong & Li, 2004), and drawing links between the two concepts and research traditions might be expected to pay theoretical and empirical dividends. In this paper we explore these links, arguing that research on IPTs, especially as they relate to intergroup phenomena such as stereotyping and prejudice, will benefit from making the connections more clear. More controversially, we will argue that IPT research can often be well framed in the more encompassing terms of psychological essentialism, and that in some cases effects attributed to IPTs might be better explained in these terms. We begin by reviewing research on the empirical association between entity theories and essentialist beliefs, and discuss evidence that essentialist beliefs illuminate several intergroup phenomena. We then present recent studies by our group that account for links between entity theories, essentialist beliefs, and stereotyping, and conclude by speculating on new ways in which essentialist beliefs might contribute to the psychology of intergroup relations.

### Entity theories are elements of essentialist beliefs

As we have argued above, there are theoretical grounds for taking entity theories to be closely linked to psychological essentialism. As Rothbart and Taylor (1992) proposed, for example, inalterability is one of two fundamental components of essentialist thinking about social categories, which represents them as natural kinds. However, the part-whole relationship between inalterability beliefs and psychological essentialism is not simply a theoretical proposition, but has been demonstrated in several studies by members of our group and others. We review this evidence below, which provides a foundation for our later arguments that IPT research can be considered within the broader framework of psychological essentialism.

In the first study of the structure of essentialist beliefs about social categories, Haslam, Rothschild and Ernst (2000) had participants rate 40 categories on items assessing nine elements of psychological essentialism. The focus of the investigation was participants' shared representations, and how these differentiated among categories, so mean ratings were examined. Categories were found to vary along two distinct dimensions of essentialist beliefs. Categories that scored high on the 'natural kind' dimension-exemplified by gender, racial, and ethnic groups-were believed to have immutable membership, to have sharp category boundaries, to have necessary or defining features, to have a natural basis, and to be historically invariant. Categories scoring high on the 'entitativity' dimension—exemplified by several stigmatized groups such as homosexuals, Jews, and AIDS patients-were believed to have relatively uniform members, to be grounded in inhering or underlying similarities, to be identity-defining, and to be highly informative about their members. Thus, immutability beliefs were strongly associated (mean r = .65) with a set of interlinked essentialist beliefs that represented some social categories as being akin to biological species. These associations, and the two-dimensional belief structure, were replicated with a different sample of categories by Demoulin, Leyens, and Yzerbyt (2003).

Later work has extended these findings regarding beliefs about social categories to beliefs about personality characteristics. Haslam et al. (2004) had participants rate 80 trait terms on items assessing a subset of the essentialist beliefs examined by Haslam et al. (2000), again using aggregated ratings. In two studies, using exploratory and confirmatory factor analysis respectively, characteristics were differentiated along a single dimension of essentialist beliefs. Traits that were judged to be relatively fixed or immutable were also believed to be biologically based, discrete (i.e. defining personality 'types'), consistent across situations, and deeply rooted in and highly informative about the person who possessed them. Although the unidimensional structure obtained in these studies differed from the structure obtained in research on social categories, immutability beliefs (i.e. entity theories) were again consistently associated (mean r = .32) with a coherent set of essentialist beliefs.

Both of the studies reviewed above addressed the structure of essentialist beliefs about particular targets, namely social categories and personality characteristics. Three further studies suggest that similar structures capture individual differences, with immutability beliefs covarying in a similar fashion with other essentialist beliefs between people. In the first of these studies, Haslam, Rothschild and Ernst (2002) examined the individual difference structure of beliefs about three social categories (i.e. women, gay men, and African Americans), using ratings on eight of the nine items developed by Haslam et al. (2000). The same two-factor structure obtained in the earlier study was supported for each of the three categories, although this structure was less well supported for beliefs about gay men and tendencies to essentialize different categories were not strongly correlated. Participants who believed membership in each category to be highly immutable, relative to their peers, were particularly apt to believe that the category was biologically based, sharply

bounded, historically invariant, and defined by necessary properties.

Immutability beliefs have also been found to covary with other essentialist beliefs in several more recent studies. Kashima et al. (2005) found that beliefs in the inalterability of a range of social targets were associated with biological causal beliefs about these targets. Haslam and Levy (in press) addressed essentialist beliefs about homosexuality, and found that individuals who believed sexual orientations to be immutable also tended to believe them to be biologically based and fixed early in life. This cohering set of essentialist beliefs was obtained in three separate studies (Ns = 309, 487, & 215) using exploratory and confirmatory factor analytic procedures in student and community samples. Near identical findings have been reported by Hegarty (2002) and Hegarty and Pratto (2001), who found consistent factoranalytic evidence for a dimension combining beliefs in the immutability, early fixing, and biological underpinnings of sexual orientation. Finally, Bastian and Haslam (in press) have shown in two studies that an entity theory measure employed by Levy et al. (1998), which assesses beliefs about 'kinds of people' in general rather than specific social categories, covaries in a unifactorial manner with comparable scales assessing beliefs in the biological basis, discreteness, and informativeness of human attributes. These studies are presented in a later section of this paper, and add to a body of work that locates immutability beliefs within an encompassing set of essentialist beliefs.

All of the research reviewed to this point involves correlational evidence, but one experimental study indicates that immutability beliefs have a causal association with other essentialist beliefs. Haslam and Ernst (2002) investigated essentialist beliefs about mental disorders, adapting a methodology developed by Chiu, Hong, and Dweck (1997). When participants were supplied with mock scientific evidence that a mental disorder was difficult to cure (i.e. immutable), they inferred that it was also historically invariant, informative, grounded in necessary properties, and natural. Similar

inferences were drawn when other essentialist beliefs were manipulated (e.g. when discreteness was manipulated disorders were inferred to be natural, informative, deeply rooted, and to have necessary properties and homogeneous sufferers). Thus the links between among essentialist beliefs, including immutability beliefs, appear to be cognitively interlinked rather than just empirically covarying.

The research that we have reviewed in this section of the paper establishes, we believe, that immutability beliefs, the cornerstone of research on IPTs, should be considered as part of a broader set of essentialist beliefs. Immutability beliefs cohere within this set whether social categories or personality characteristics are the relevant targets, whether differences between targets or differences between people are concerned, whether targets are specific or generalized, and whether correlational or experimental methods are employed. We conceptualize essentialist beliefs as a network whose components have overlapping but partially specific implications for group and person perception. Different beliefs may have particular relevance to particular social-cognitive processes (e.g. discreteness beliefs for group perception, biological basis beliefs for explanation of individuals' behavior), may have divergent implications for evaluation of certain categories (e.g. Haslam & Levy in press, on anti-gay attitudes), and may be differently organized in relation to social categories (twofactor model for social categories; Haslam et al., 2000 vs. personal attributes (one-factor model for personality characteristics; Haslam et al., 2004)). Nevertheless, we propose that in the typical case essentialist beliefs form a network whose components are linked but not fully redundant.

This proposal implies that the consistent links between entity theories and other essentialist beliefs reviewed above are not at all incompatible with immutability beliefs having a specific role to play in social cognition and intergroup relations. The association between these beliefs and the broader network of essentialist beliefs therefore does not diminish the importance of IPT research as it has been

conducted to date. However, it does at least raise the possibility that this research might benefit from an expanded focus. If beliefs about the fixedness of human attributes and groups have implications for intergroup phenomena, then we believe it must be asked whether associated beliefs have similar, different, or additional implications. Further, it must be asked whether these implications should be ascribed to immutability beliefs in particular or to essentialist beliefs in general. In the next section of this paper, we argue that essentialist beliefs as a set do have important bearings on intergroup phenomena, and in the following section we argue that at least some effects attributed to entity theories might be explained better in terms of essentialist beliefs.

## Essentialist beliefs illuminate intergroup phenomena

From the outset, theorists have argued that essentialist beliefs about social categories are not simply abstract ontological intuitions, but that they have important implications for group perception and evaluation. Half a century ago, Allport (1954) proposed that a belief in a group essence was a fundamental attribute of the prejudiced personality, and Rothbart and Taylor (1992) maintained that viewing social categories as natural kinds exaggerates and deepens perceived differences between groups. Yzerbyt and his colleagues have proposed a 'subjective essentialist' account of stereotyping (Yzerbyt & Rocher, 2002; Yzerbyt, Rocher & Schadron, 1997), according to which essences serve as theories that give explanatory coherence to group stereotypes and foster dispositional attributions. In addition, Yzerbyt and colleagues argue that essentialist beliefs serve a function of rationalizing and legitimating existing social inequalities by portraying them as natural and inevitable.

Empirical research on the implications of essentialist beliefs for group perception has only recently begun to examine some of these theoretical claims, but it has yielded promising results. Consistent with their position, Yzerbyt and colleagues have shown that perceiving groups to have an underlying reality accentuates perceived differences between them (Yzerbyt & Buidin, 1998) and promotes the use of dispositional attributions for their members' behavior (Yzerbyt, Rogier & Fiske, 1998). In a similar vein, Estrada, Yzerbyt and Seron (2004) demonstrated that people who scored high on an essentialist belief scale were more likely to explain intergroup differences with reference to inherent biological factors. The role that essentialist thinking plays in justifying social inequalities and political claims has been demonstrated by Verkuyten (2003), in a study of discourse about ethnicity in the Netherlands. Importantly, Verkuyten shows that essentialist positions are not straightforwardly regressive, and may have progressive implications when used by minority groups to advance their claims for cultural continuity.

Other research has addressed individual differences in essentialist beliefs as predictors of prejudice. Haslam et al. (2002) found that essentialist beliefs about the nature of women and African Americans did not correlate consistently with explicit measures of sexism and racism, contrary to Allport (1954), but that essence-related beliefs about male homosexuality were powerfully associated with anti-gay attitudes. Interestingly, participants holding more essentialist beliefs were not invariably more prejudiced, as some anti-essentialist beliefs (e.g. in the mutability and lack of biological basis of male homosexuality) were associated with anti-gay attitudes.

Haslam and Levy (in press) followed up this finding in studies of essentialist beliefs about sexual orientation. Factor analyses yielded three dimensions of essentialist beliefs about male homosexuality and lesbianism, which had conflicting associations with prejudice. Believing that homosexuality is biologically based and immutable, and that it is universal across cultures and throughout human history, was associated with pro-gay attitudes, whereas believing that gay men and lesbians are categorically distinct from heterosexuals was associated with anti-gay attitudes. In addition to clarifying the linkages between essentialist beliefs and attitudes, Haslam and Levy found that these

beliefs substantially accounted for differences in prejudice as a function of ethnicity, religiosity, and gender. Ethnic and religious differences in anti-gay attitudes were substantially reduced when corresponding differences in immutability and biological basis beliefs were statistically controlled. Similarly, gender differences in antigay attitudes, which were obtained only for attitudes to gay men, were reduced when discreteness beliefs were controlled. This pattern of findings, where predominantly heterosexual men held more prejudiced attitudes than women only toward people of their gender, and the difference was largely explained by their greater belief that gay men are different in kind, has clear implications for the function of essentialist beliefs. Such beliefs may, that is, serve an ego defensive or boundary reinforcement function, enabling prejudiced individuals to disavow and distance themselves from a despised identity.

Research on the infra-humanization of outgroups (e.g. Leyens et al., 2001, 2003) reveals another way in which essentialist beliefs contribute to an understanding of intergroup perception and 'emotional prejudice'. In a series of studies, Leyens and colleagues have demonstrated that people selectively attribute distinctively human or 'secondary' emotions to their ingroups, and thereby ascribe a lesser degree of humanity to outgroups. Levens and colleagues argue that this 'infra-humanization' effect involves a denial of the 'human essence' to outgroups, and that it is distinct from the wellestablished finding of ingroup favoritism. They further maintain that an essentialist perception of groups is a precondition of infra-humanization. Consistent with this claim, Demoulin et al. (2002) found that the infra-humanization effect was moderated by the extent to which participants essentialized and identified with their ingroup, a finding that was substantially replicated by Paladino, Vaes, Castano, Demoulin, and Leyens (in press). Thus it is only when people believe that their ingroup has a meaningful underlying basis and identify with it that they infra-humanize outgroups. Further support for the role of essentialist beliefs in infra-humanization was obtained by Haslam

et al. (2004), who showed that the extent to which personality characteristics are seen to be aspects of human nature is strongly correlated (r=.75) with the extent to which they are essentialized. Thus human nature does appear to be understood in an essence-like fashion.

Findings such as those reviewed in the present section strongly suggest that essentialist beliefs have a significant role to play in the social psychology of intergroup relations. They have been shown to bear on group perception, stereotyping, social attribution, discourse about group differences, and prejudice. Although immutability-related beliefs are specifically implicated in one or two findings, there is little evidence that they have a privileged position among other essentialist beliefs. In the next section, we present new empirical work that directly challenges the privileging of immutability beliefs.

### Essentialist beliefs and stereotype endorsement

To this point we have argued that entity theories—beliefs in the fixedness of human attributes—belong to an encompassing set of essentialist beliefs, and that these beliefs are associated in a sometimes complex fashion with the endorsement of prejudiced attitudes. Research in the IPT tradition has addressed related questions, and in particular the role of entity theories in stereotype endorsement.

Findings such as those of Levy et al. (1998) demonstrate the powerful role that entity theories may play in the perception of groups. However, if these theories are simply elements within a broader set of essentialist beliefs, then it is unclear whether the effects attributed to entity theories might not be better accounted for by essentialist beliefs. Beliefs about the immutability of human attributes might have a privileged role among other covarying beliefs in predicting stereotype endorsement, but it is also possible that immutability beliefs have no such role when other essentialist beliefs are taken into account. Stereotype endorsement might be fostered by essentialist beliefs as a whole, rather than entity theories in particular.

To test this possibility, two of us (Bastian & Haslam, in press) recently conducted studies that substantially replicated Studies 1, 2, and 5 from Levy et al. (1998). In a pilot study with 60 undergraduate participants, Bastian and Haslam developed new individual difference measures of three essentialist beliefs. These scales were closely modeled in wording and response format on the eight-item entity theory measure employed by Levy et al. (1998), which was also administered. The new scales assessed the extent to which human attributes are believed to have a biological basis, to divide people into discrete categories, and to be richly informative about the individuals who possess them. In a separate part of the pilot study, participants freely generated stereotypical attributes for nine social categories (based on gender, sexual orientation, ethnicity, and occupation) for use in the main study.

Results of the pilot study indicated that the new essentialist beliefs scales had adequate reliability, with the new scales somewhat less reliable that the entity theory scale, and that they correlated positively with one another and with the entity theory measure. Consistent with the research reviewed above, that is, beliefs in the immutability of human attributes covaried systematically with beliefs in their biological basis, discreteness, and informativeness. As in Levy et al. (1998), the essentialist belief and entity theory scales did not correlate with stereotype knowledge, as indexed by the number of stereotypical attributes listed. These attributes were collated and the six most commonly mentioned positive and negative attributes for each of the nine categories were retained for the main study.

In the main study, modelled on Levy et al.'s (1998) Study 5, Bastian and Haslam (in press) administered the entity theory and essentialist beliefs scales to 114 undergraduates. Participants also completed five additional scales assessing individual differences linked to stereotyping: right-wing authoritarianism (RWA: Altemeyer, 1988), need for cognitive closure (Webster & Kruglanski, 1994), attributional complexity (Fletcher, Danilovics, Fernandez, Peterson, & Reeder, 1986), need to evaluate

(Jarvis & Petty, 1996), and social dominance orientation (SDO: Pratto, Sidanius, Stallworth, & Malle, 1994). With the exception of SDO, all of these scales were employed by Levy et al. (1998). In an ostensibly separate part of the study, participants rated their level of agreement with 108 stereotypical attributes (12  $\times$  9 categories), the average level constituting our measure of stereotype endorsement. Participants then reported whether or not they were aware that each attribute was commonly associated with each category (stereotype knowledge). Finally, they rated their agreement with three possible explanations for the existence and perpetuation of a subset of these stereotypes (i.e. three positive and three negative attributes for Aboriginals and homosexuals). As in Levy et al.'s (1998) Study 2, two of these explanations referred to innate or inherent factors within category members, and one referred to social or environmental factors.

As in the pilot study, the essentialist belief and entity theory scales again intercorrelated positively, and a principal components analysis indicated that they all loaded on a single dimension. This is consistent with the hypothesis that immutability beliefs (entity theories) belong to an encompassing set of essentialist beliefs: people who understood human attributes to be fixed also tended to believe them to be biologically based, categorical, and inductively potent. In view of the coherence of the four belief scales, we summed them to form an 'essentialism index'. Replicating Levy et al. (1998), we found that the entity theory scale was significantly associated with stereotype endorsement. However, this association was not specific to immutability beliefs, as the three new essentialist belief scales also significantly predicted stereotype endorsement, as did the essentialism index (r = .33, p < .01). Again, no belief scales correlated with stereotype knowledge.

One of the most striking findings obtained by Levy et al. (1998) was that their entity theory scale predicted stereotype endorsement independently of a number of established individual difference measures known to be associated with stereotyping, and that its unique predictive

contribution was larger than all of them. We replicated this finding in a multiple regression analysis in which the essentialism index substituted for the entity theory scale and served as a predictor alongside the five individual difference measures. Essentialist beliefs ( $\beta = .31$ , p <.01) predicted stereotype endorsement more strongly than RWA ( $\beta = .27$ , p < .05), and the effects of need for cognitive closure, need to evaluate, attributional complexity, and SDO were all weak and nonsignificant. A series of six hierarchical multiple regressions was then conducted, in which all but one predictor was included in the first step and the remaining predictor was added in the second. Only essentialist beliefs and RWA made incremental predictive contributions, and the former was almost twice the magnitude of the latter ( $\Delta R^2$  = .082 vs. .042). Thus essentialist beliefs appear to play a unique and relatively powerful role in the endorsement of group stereotypes.

Given that the essentialism index incorporated Levy et al.'s (1998) entity theory scale, the immutability beliefs that it measures may be responsible for the index's association with stereotype endorsement. To test this possibility we conducted an additional analysis in which stereotype endorsement was regressed on the entity theory measure and the three other belief scales. The four scales collectively predicted stereotype endorsement (F(4,109) = 3.45, p < .01). Biological basis ( $\beta = .19$ , p < .05) and informativeness ( $\beta = .14$ , p = .08) had significant or marginal individual effects, but entity theory ( $\beta = .12$ , p = .11) and discreteness ( $\beta = .09$ , p = .18) did not.

Although they only represent a single study, these findings have implications for the role of entity theories in stereotyping. Replicating Levy et al. (1998), we found that entity theorists do indeed endorse stereotypes more than their incremental theorist peers. However, this association appears to be substantially explained by the part-whole relationship that exists between entity theories and essentialist beliefs. Entity theories had no association with stereotype endorsement independent of other essentialist beliefs, with which they covaried. Needless to say, immutability beliefs may have a

privileged role among these beliefs in some domains—they did, for example, predict innate/inherent explanations for stereotypes better than the other scales ( $\beta$  = .26, p < .01 vs.  $\beta$  = .16, p < .05 for biological basis)—and our findings in no way diminish the importance of entity theories. Nevertheless, they suggest that effects attributed to entity theories might, in at least some cases, be attributed to essentialist beliefs as a set. Rather than ascribing IPT effects specifically to a 'fixed' view of human characteristics, it may sometimes be more appropriate to ascribe them to an 'essentialist' view.

#### Advantages of conceptualizing implicit theory research in terms of essentialist beliefs

We have reviewed research on the relationships between essentialist beliefs, stereotype endorsement, and prejudice, arguing that IPTs can be understood within a broader framework that may in some cases make better sense of IPT research findings. In this final section of the paper, we suggest a few ways in which IPT research might benefit from a more explicit consideration of research and theory on psychological essentialism.

The first potential benefit that we see coming from a greater attention to essentialist beliefs among IPT researchers is an expansion of the range of theories that they might study. Beliefs about the fixedness vs. malleability of human attributes are undoubtedly important in a host of ways, and they have stimulated a great deal of research, but very little comparable work has addressed related essentialist beliefs. We know very little, for example, about how beliefs about the biological basis of human attributes influence group perception and prejudice (Keller, 2005). Some evidence suggests that such beliefs may be associated with stigmatization of people with mental disorders (Read & Harré, 2001), but in our genomic age it is remarkable that they have not received greater attention. A similar case could be made for investigating beliefs in the discreteness of human attributes and categories, to the degree that typological thinking might be expected to have important

implications for stereotyping and prejudice. In short, other essentialist beliefs might benefit from the sort of thorough assessment and experimental investigation that until now has been lavished almost exclusively on immutability beliefs.

A second potential benefit for IPT research from greater contact with work on psychological essentialism is an appreciation of the potential positive implications of essentialist beliefs. Entity theories have usually been represented in the literature in negative terms. Although they enable swift inference of positive traits and facilitate evaluation-based categorization in a way that may promote efficient information retrieval (Tong & Chiu, 2002), they also promote stereotyping, bias, shallow processing of social information, overly rapid interpersonal judgments, and problematic approaches to learning. Although the evidence linking entity theories to these negative implications is persuasive, and a similarly negative impression runs through much research on essentialist beliefs, recent evidence suggests that essentialist thinking is not always malignant. Some essentialist beliefs are associated with pro-gay attitudes (Haslam et al., 2002; Haslam & Levy, in press), essentialist discourse can have progressive implications for minority groups facing pressure to assimilate (Verkuyten, 2003), and essentialized ingroups are highly valued by their members (Castano, 2004). In addition, people attribute the 'human essence' (operationalized as uniquely human emotions) to their ingroups more than to outgroups (Leyens et al., 2001), and essentialized personality characteristics are seen as highly desirable (Haslam et al., 2004) and attributed more to self than to others (Haslam, Bain, Douge, Lee, & Bastian, in press). Although none of this evidence overrides the evident associations of essentialist thinking with stereotyping and prejudice, it suggests a more nuanced view that IPT research might adopt. Are there contexts where entity theories have personally or socially advantageous implications?

A third potential benefit for IPT research concerns the focus in some essentialism research and theory on the social or personal functions that essentialist beliefs may serve. Most research on IPTs emphasizes the cognitive processes associated with them rather than how (or if) they are motivated. When the functional basis of these theories is discussed, it is only the cognitive or 'epistemic' functions that are considered, specifically the role that IPTs play in the intuitive scientist's sense making (Hong, Levy, & Chiu, 2001). In contrast, theorists have entertained the possibility that essentialist beliefs serve a variety of more social and affectively charged functions, such as rationalizing and legitimating social arrangements (Yzerbyt et al., 1997), promoting social inferences about outgroups and avoiding coordination failures with their members (Gil-White, 2001), or defending against undesired social identities (Haslam & Levy, in press). Although empirical work on the functions of essentialist beliefs has lagged behind theory, an expanded focus on the functional implications of IPTs may represent a fruitful direction for researchers.

Social psychological research on essentialist beliefs has tended to address particular social categories, such as racial, ethnic, gender, or sexual orientation groups. IPT work, in contrast, has tended to focus on relatively broad psychological domains: intelligence, morality, and personality. We suggest that a fourth potential advantage to flow from greater contact between IPT and essentialism research is a new focus on implicit theories about specific social categories. It is certainly true that broad theories—in the fixedness of human personality, for example—have demonstrated associations with intergroup phenomena such as stereotyping. However, we believe that there are likely to be benefits from addressing implicit theories about particular social groups in addition to more global theories. There is some evidence that people do not consistently essentialize across social categories in a trait-like fashion (e.g. Haslam et al., 2002) and also that different social categories and personality attributes are essentialized to markedly different degrees (e.g. Demoulin et al., 2003; Haslam et al., 2000, 2004). In view of this evidence, a more category- or attribute-specific approach to IPTs might reap empirical benefits.

A final advantage that we foresee coming from a rapprochement between research on IPTs and on essentialism is a concern with patterns of change. IPT research proceeds from a basic opposition between stability and change, and essentialist beliefs are also usually framed in terms of stability. However, essences can be understood not only as sources of observable stability, but also as explanations of underlying continuity in the face of observable change. On this view, an essence might be invoked to explain why a larva and the butterfly it becomes are one and the same organism. This sense of essence as continuity despite apparent transformation underpins research on the development of children's understandings of natural kinds (e.g. Gelman, 2003) and on how people understand personal continuity in life narratives (Chandler, Lalonde, Sokol, & Halett, 2003). If researchers in the IPT tradition were to take up this view of essentialism, they might profitably examine theories about the sources or trajectories of change, rather than simply about its presence or absence. Two people might equally believe change to be possibleand in this sense be incremental theorists-but one might believe it occurs as a function of environment and context while the other sees it as the unfolding of an internal disposition (e.g. an individual's maturational blueprint or a group's destiny). In short, research informed by work on psychological essentialism might begin to examine people's intuitions about how and why groups have undergone historical change and may undergo further change in future. We are beginning a program of work on lay theories about societal change that illustrates this possibility.

# Advantages of linking essentialism research to implicit theory research

We have emphasized ways in which research in the IPT tradition might benefit from research and theory on psychological essentialism, but the benefits surely flow in both directions. IPT research has much to offer students of essentialism. We will briefly describe a few of these benefits, as we see them. First, research on IPTs provides a good example of methodological rigor, a focus on social-cognitive processes that is often lacking in social psychological research on essentialist beliefs. Much social psychological research on essentialism employs descriptive and correlational methodologies, which certainly have their place, but IPT researchers have taken more steps to link theories to information processing strategies, using social cognition methodologies (e.g. Plaks et al., 2001; Tong & Chiu, 2002) in ways that essentialism researchers might emulate.

Second, IPT researchers have a record of addressing lay theories of several psychological phenomena that have been inexplicably neglected by essentialism researchers. Implicit theories of intelligence have been a major focus of attention, but researchers have yet to investigate the extent to which people essentialize intelligence more generally, despite the topicality of this issue during the ongoing debates surrounding IQ. The same could be said for implicit theories of character and morality (Chiu et al., 1997), which have yet to attract the attention of essentialism researchers. Implicit theories have also been investigated in domains that do not refer to person attributes (e.g. relationships; Knee, Patrick, Vietor, & Neighbors, 2004), and these might also be investigated from the standpoint of psychological essentialism, although they do not invariably involve immutability beliefs and the relevance of essentialism may therefore be reduced.

Third, IPT researchers have argued that implicit theories are organized as discrete, coherent belief systems (Levy et al., 2001) rather than as varying by degree along a continuum like ordinary traits (Haslam & Kim, 2002). Entity theories differ qualitatively from incremental theories, and both are worthy of attention in their own right. Accordingly, people are usually classified into distinct groups in IPT studies. In contrast, essentialism researchers have generally been silent on the issue of whether essentialist beliefs apply categorically or dimensionally, and if the former is the case, what a non-essentialist belief might be. One study of beliefs about depression finds

preliminary support for a categorical view of essentialist beliefs (Haslam, 2002), and research in the physical domain suggests that if objects are not conceptualized as (essentialized) natural kinds they are understood either as convention-based nominal kinds or function-based artifacts (Keil, 1989). Essentialism researchers might benefit by following the lead of IPT researchers and paying more equal attention to the nature of non-essentialist thinking. Are non-essentialized social categories understood primarily in terms of social conventions or particular social functions, and does this distinction have important consequences for group perception?

#### **Conclusions**

The IPT approach to the study of intergroup phenomena is a promising one that rests on a solid foundation of achievement. Research on essentialist beliefs about social categories is of more recent vintage. However, we believe that it has a great deal to contribute to the empirical and theoretical understanding of people's basic understandings of the nature of human groups and attributes, a topic that it shares with the IPT tradition. We have argued that implicit theory approach emphasizes one among several components of essentialist thinking, and that it can be usefully understood within that more encompassing framework. Drawing connections between the IPT and essentialist beliefs approaches, and learning reciprocal lessons, should have beneficial consequences for both traditions. We believe that the fruits of these connections will become increasingly obvious in the coming years.

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