

Setting an Agenda for a Person-Centered Approach to Personality Development

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In their monograph, Hart, Atkins, and Fegley (this issue) make a broad and important contribution to the field of personality development by bringing a person-centered approach to the forefront of developmental psychology. Over the past decade, articles by Asendorpf, Caspi, Gjerde, Hart, John, Robins, van Aken, and others have revitalized the person-centered approach and established the existence of a replicable taxonomy of personality types. This new generation of research has spurred an emerging consensus that the person-centered perspective provides an important and necessary complement to the variable-centered studies that currently dominate the field. In our view, Hart et al.'s monograph represents a timely manifesto for the field of personality development.

Hart et al. describe a series of highly programmatic studies that, together, tell a coherent and interesting story about the nature, correlates, and consequences of personality types. Using data from the National Longitudinal Study of Youth, Hart et al. identify three personality types by conducting cluster and inverse factor analyses of maternal ratings; demonstrate that these types are replicable, stable over time, and predict developmentally significant outcomes; identify developmental factors that predict change in type membership; and provide insights into how personality type moderates the impact of interventions such as Head Start. The research is methodologically strong, using large and diverse samples, longitudinal and quasi-experimental designs, multiple independent data sources, and growth curve modeling of developmental trajectories.

The findings provide an empirical foundation for future research on personality types, and have important applied implications, particularly for the design and implementation of interventions. More generally, type-based research may help forge a stronger connection between personality and developmental psychology, because developmentalists tend to make the

child the focus of their science and often incorporate a type perspective into their research traditions (e.g., infant attachment). Thus, the study of types can be an important nexus for the two disciplines.

This commentary is divided into two sections. In the first section, we describe the specific features and benefits of the person-centered approach. In the second section, we identify several unanswered questions and suggest directions for future research.

What is the Person-Centered Approach and Why is it Useful?

General Aims and Features of the Approach

In our view, the most important contribution of the monograph is its promotion of a person-centered approach. Hart et al. illustrate the usefulness of this approach by demonstrating how typological methods can be used to understand developmental processes and outcomes. The authors do not explicitly specify the central features and benefits of the approach, so we will do so in this commentary.

The overarching assumption of the person-centered approach is that personality traits should not be studied in isolation. Instead, personality researchers should focus on the total constellation of traits that define each person, and the way these traits work together as a dynamic, integrated system. A central goal of this approach is to identify groups or subsets of individuals (i.e., “types”) who have similar configurations of traits and thus share the same basic personality structure (Block, 1971). More specifically, the approach seeks to identify regions in multivariate space where individuals are densely clustered, implying the existence of homogeneous subgroups. Individuals occupying the same cluster are assumed to have a shared etiology and similar personality dynamics.

Psychologists have described the typological approach as "carving nature at its joints",

because it attempts to carve human personality into categories comprised of individuals who share the same basic traits (Meehl, 1979, p. 566). Although contemporary typological researchers rarely make such lofty claims, they do argue, and demonstrate in their research, that personality typologies can be held to the same evidentiary standards as trait-based taxonomies like the Five-Factor Model. In fact, the typological approach, as it has evolved over the past decade, has several key features that parallel the features of the research that led to the development of the Five-Factor Model. First, contemporary typological researchers use sophisticated multivariate procedures to identify types *empirically*; in contrast, most early personality typologies were based on armchair theoretical speculation. Second, researchers now focus only on types that *replicate* and show some *generalizability* across sex, ethnicity, and culture, with the ultimate goal being to construct a universally applicable personality taxonomy. Third, researchers interpret types by constructing elaborate *nomological networks* based on multiple independent data sources. Fourth, researchers have focused on developing a *hierarchical* taxonomy that classifies people both at a general level of broad types and into more specific, narrower subtypes. Fifth, researchers have begun to explore the *developmental origins* and *sequelae* of the types, as well as the processes that mediate the influence of each type on developmental outcomes. Sixth, researchers have recognized the need to provide a deeper *conceptual understanding* of the empirically derived types by drawing on personality and developmental theories.

Although much progress has been made on these issues, many questions remain unanswered. In a subsequent section, we will elaborate on these questions and note important directions for future research.

Benefits of the Approach

Focus on intraindividual structure of personality. Taking a person-centered approach has several benefits for the study of personality development. Perhaps most importantly, it encourages researchers to think about configurations of traits within individuals, whereas the dimensional approach is silent about the intra-individual structure of personality. Adopting a typological approach compels researchers to focus on personality as a system of traits that work together to produce particular developmental trajectories and outcomes. Although the dimensional approach does not preclude examining the dynamics among different traits, the typological approach emphasizes this aspect of personality functioning.

An analogy may help to highlight this potential benefit. An illness such as the flu can easily be broken down into a set of dimensional symptoms, including temperature, degree of nasal congestion, frequency of coughing, and intensity of headache. However, much would be lost in understanding the illness if researchers focused on the correlates and consequences of each specific symptom in isolation from the others. By conceptualizing the flu as a constellation of symptoms that co-occur within particular individuals, researchers can focus on understanding the subgroup of individuals who have the flu, and ask questions such as: Does their illness have a shared etiology, does it follow the same course over time, and, do the same interventions reduce or eliminate the symptoms?

Descriptive efficiency. A second benefit is that taxonomies, such as the three personality types examined by Hart et al., are efficient classification systems. Indeed, this is the power of a taxonomic system—by classifying something, we learn a great deal about it because members of the same category share many features, outcomes, and correlates. Although it has been argued that as the science of psychology progresses, researchers must move from a typological to dimensional perspective, in the natural sciences “type-like” conceptualizations are both common

and useful. In fact, in the natural sciences, taxonomies are typically used to classify the basic subject matter of the discipline (e.g., animals, stars, or elements), not the traits or features of the subject matter. For example, the Linnaean taxonomy classifies animals, not the traits that characterize them (e.g., hair, warm vs. cold-blooded, etc.). In contrast, personality researchers have focused on classifying traits (e.g., responsible) rather than people. Both are important taxonomic goals, and one should not be neglected in favor of the other.

Current typological approaches to personality, such as the one described in the monograph, are purely descriptive, based on phenotypic similarities and differences. However, as these systems advance, researchers can work towards an explanatory taxonomy of personality types. Such a system might classify people according to their developmental origins (common genetic and environmental roots), thereby providing an overarching framework for *why* different children have different personalities. By delving into the etiology and psychological dynamics of each personality type, we can eventually learn more about the mechanisms that drive behavior and the role of individual differences in personality. A similar progression has occurred in natural science typologies, where descriptive taxonomies have often paved the way for explanatory ones. The Linnaean taxonomy originated as a purely descriptive system, based on phenotypic similarities and differences among species, but it was modified in light of Darwin's theory of natural selection to become an explanatory taxonomy based on phylogenetic similarities and differences.

Types as moderator variables. A third benefit of the approach is that personality typologies can facilitate the search for moderator variables. In developmental research, moderators often take the form of subgroups of individuals who show differential responses to environmental experiences or interventions. The search for such moderators is rarely theory

driven and instead tends to be based on demographic variables such as gender, ethnicity, and social class. The availability of a personality typology provides a system for classifying individuals into subgroups defined by psychological characteristics, which are likely to interact with interventions and other environmental effects. For example, Hart et al. found that personality type moderates the longterm effects of the Head Start program. To the extent that types are embedded in a nomological network with rich theoretical connections, researchers will have a stronger rationale for generating hypotheses about the circumstances under which subgroup differences might emerge.

Predictive validity. There are several empirical benefits associated with assessing and conceptualizing personality in terms of types. Most notably, as Hart et al. showed, types can have greater predictive validity than traits (but see Costa, Herbst, McCrae, Samuels, & Ozer, 2002). The presence of an interaction between type and an intervention, such as the Head Start program, can also improve prediction by showing that the intervention works better for some children than for others. This kind of interaction has important implications for policy-makers (e.g., it may be wise to use Head Start programs only with certain sub-groups of children and to design new interventions targeted at the subgroups that benefited the least), and for program evaluators (e.g., a blanket evaluation collapsed across all children would hide the greater benefit to certain children). However, because participants were not randomly assigned to the Head Start program, some of the interaction effects documented in the monograph could reflect selection rather than response or evocation effects; for example, members of a particular type who were enrolled in the Head Start program might differ from those who were not on some relevant variable.

For developmental researchers, adopting a type approach is particularly important

because is it unlikely that environmental events and contexts ever influence a single trait in isolation. Parents, teachers, and other socializing agents interact with the whole child, not with one trait at a time. The way a child responds to a complex environment like the Head Start program will depend on the child's unique configuration of traits, not just his or her level on a single dimension like extraversion.

Conceptual clarity and intuitive appeal. The type approach also has practical advantages because lay people generally think of personality in terms of types (e.g., "He's a bully"), not traits. Types are intuitively appealing and, although science should not be constrained to our intuitions, this is not a trivial point when it comes to communicating findings to those who make decisions and allocate resources to intervention programs. Findings concerning types are much easier to communicate to the public than are findings concerning dimensions. For example, Hart et al.'s finding that Resilient children show more adaptive outcomes is easier to explain to clinicians, counselors, educators, parents, and policy makers than is research showing how the Big Five dimensions relate to similar outcomes. In fact, when discussing correlational research on traits with the general public, researchers often describe dimensional findings in type terms, by labeling the extremes of the dimension.

By highlighting the benefits of the person-centered approach, we are not discounting the importance of traditional dimensional approaches. Rather, like Hart et al. and Gordon Allport, we believe that "No doors should be closed in the study of personality" (Allport, 1946; pp. 133-134). Typological and dimensional frameworks can co-exist and fruitfully inform each other, as they do in other areas of psychology. For example, Bowlby and Ainsworth originally conceived of attachment styles as discrete types, each with a clear set of consequences and correlates for development and relationships. The classification of a child as "secure" has an intuitive appeal

that rings true to parents, and allows for the “I know children like that” sense of recognition that is absent from describing a child as low in Avoidance and low in Anxiety. In fact, regardless of whether one believes that attachment styles reflect discrete taxons (Fraley & Spieker, 2003), the field’s emphasis on types rather than dimensions may be one important reason why the theory became so prominent. The emphasis on attachment types, and consequently on the dynamics of particular subgroups of children, promoted researchers to conceptualize attachment-related thoughts, feelings, and behaviors in terms of an underlying, evolved neurobiological attachment system. This kind of thinking can be conceptually richer than defining attachment in terms of a person’s scores on isolated dimensions, such as anxiety and avoidance. Consequently, in some contexts attachment researchers find it beneficial to think about and analyze data using a typological approach, whereas in other contexts they find a dimensional approach more useful, as is illustrated by a recent debate in *Developmental Psychology* (Teti, 2003). Thus, researchers might do well by reframing the question from, “Which is better—types or traits?” to “Under what circumstances is one more appropriate or predictive than the other?”

In summary, personality typologies facilitate the three basic goals of science: description, prediction, and explanation. We now turn to the many exciting avenues for future research in this area.

Future Directions and Unanswered Questions

Refining the Taxonomy

The search for additional broad types. Research accumulating over the past decade suggests that, at the broadest level, there are three personality types that generally replicate across childhood (Hart et al., this issue), adolescence (Robins et al., 1996), and adulthood (Asendorpf, Borkenau, Ostendorf, & van Aken, 2001). Yet, the question remains: Are there

really three and only three broad types? Although some studies have found additional types (e.g., Barbaranelli, 2002; Caspi & Silva, 1995; Pulkkinen, 1996; York & John, 1992), so far none of these has replicated consistently across studies. These failures to replicate could reflect the wide range of factors that influence the particular types that emerge in a given study, including the language and culture of the judges, the age of the participants, the instrument used to assess personality, and the statistical procedure used to derive the types. Nonetheless, future research should explore whether these additional types constitute independent broad types, or subtypes that can be subsumed within the three replicable types.

Universality of the three types. It is important to determine the extent to which the three personality types are cross-culturally universal, because doing so would provide insights into the extent to which the types are cultural artifacts or part of human nature. The most extreme position would be that humans evolved, perhaps through frequency-dependent selection, to develop as one of the three types. Hart et al., along with previous researchers, have provided some evidence of generalizability across age, gender, ethnicity, and social class. However, virtually all of the existing cross-cultural studies have been conducted in highly industrialized and Western-influenced countries, including the United States, Germany, Iceland, and Italy.

There are several ways in which the types might not generalize across cultures. First, although three types might be found across cultures, there may be subtle (or not so subtle) differences in the content of the types (e.g., Costa et al., 2002; Robins, John, & Caspi, 1998). For example, the Resilient type that Asendorpf and van Aken (1999) found in their German sample was defined by more ego control items than the Resilient type that Robins, John, Caspi, Moffitt, and Stouthamer-Loeber (1996) found in their U.S. sample. These kinds of differences could reflect either an actual cultural difference in personality or, because the type classifications are

based on self- or other-reported personality descriptions, culturally determined differences in lay theories about personality. Thus, researchers need to hone in on the precise nature of the three types, and work toward a canonical definition of each type that transcends cultural differences.

Second, cross-cultural studies may reveal additional broad types that replicate only within particular cultures; for example, Barbaranelli (2002) found a “Non-desirable” type in their Italian sample, but this type has not emerged in any other studies. It remains to be seen whether this fourth type is replicable across Italian samples or is sample specific.

Third, the frequency of the three broad types may vary across cultures; for example, Asendorpf and van Aken (1999) found a greater proportion of Overcontrollers than did Robins et al. (1996). The authors attributed the differences they found to sampling, rather than cultural (i.e., German vs. American), issues, but further studies are needed to fully address this question. Similarly, there may be cultural differences that interact with other variables, such as gender. For example, in most studies, the Undercontrolling type has a higher proportion of males than females, but Babaranelli (2002) found more female than male Undercontrollers in their Italian sample.

Fourth, types defined by similar personality configurations might exist universally, but show variations in their expression, development, or correlates. For example, Boehm, Asendorpf, and Avia (2002) found that Spanish Resilients were more Agreeable than German Resilients, whereas Spanish Overcontrollers were less Agreeable than German Overcontrollers.

The search for subtypes. The three personality types provide a fairly rough classification system, similar to the general Linnaean categories of bird, fish, mammal, amphibian, and reptile. Despite its breadth, a classification system at this level can be highly useful, because identifying a dog as a mammal rather than a fish entails a great deal of descriptive and explanatory

information about this animal (e.g., it has hair or fur and evolved most recently from other mammals). On the other hand, we can still make important distinctions among the mammals—dogs clearly differ in important ways from rhesus monkeys. For this reason, the animal taxonomy, like most other natural science taxonomic systems, is hierarchical and makes many more distinctions than the broad classes. Thus, a complete personality typology should provide a way to classify people into broad types such as those described by Hart et al., and into more specific subtypes that afford a more fine-grained level of description and understanding than the three broad types alone.

Robins et al. (1998) began this task by identifying subtypes in a sample of adolescent boys. There were no replicable subtypes within the relatively small group of Overcontrollers, but there were two in the Resilient group (“Agentic” and “Communal”) and two in the Undercontrolling group (“Antisocial” and “Impulsive”). Each subtype had a distinct personality profile and developmental correlates. However, subsequent attempts to identify subtypes have failed to replicate these findings, or to find other subtypes that replicate across studies (Boehm et al., 2002; Schnabel, Asendorpf, & Ostendorf, 2002). The difficulty type researchers have had in uncovering the hierarchical structure of the typology is not surprising given how elusive the goal of fleshing out the facets of the Big Five dimensions has proven. Future research is thus needed to determine the sub-taxonomic structure of personality, and to further explicate the psychological nature of various subtypes. Eventually, the additional degree of descriptive precision provided by subtypes should improve the ability to predict important developmental outcomes.

Developmental Origins

Hart et al.’s findings clearly indicate that personality type matters—for example,

individuals classified as Resilient show more promising academic and social outcomes than do those classified as Undercontrolled. Thus, policy-makers, clinicians, teachers, and parents who wish to change the developmental trajectory of certain at-risk children may need to intervene at the source of the problem—the root causes of each type. The study of types provides a descriptive map of personality variability that may help us refine our search for distinct developmental pathways. Members of a given type are assumed to share a common etiology and to follow a similar developmental path. But, what is this etiology, and how can we trace these paths? As Hart et al. point out, “the developmental and personality processes that result in these types remains unknown, and these processes should be the targets of future research” (p. 87).

Can we trace the roots of the types to particular configurations of temperamental characteristics or to specific childhood experiences? With regard to questions about nature and nurture, most behavioral genetic research on personality development has focused on dimensional models, and we know little about the heritability of personality types. Rutter (2002; Rutter, Pickles, Murray, & Eaves, 2001) recently described a rich array of research designs aimed at teasing apart shared and nonshared environmental influences and understanding the interplay between environmental and genetic factors, including adoption studies, twin studies, natural experiments, migration designs, time series analyses, and intervention studies. All of these designs could be used effectively to examine the developmental origins of the types.

The strong conceptual interpretation of types—that they “carve nature at its joints”—suggests that they might prove to be even more heritable than traits. Consistent with this view, much of the genetic variance in personality reflects interactions among genes (i.e., non-additive effects), an idea referred to as emergence (Lykken, McGue, Tellegen, & Bouchard, 1992). As a result, certain phenotypic behavioral traits are an emergent property of a configuration of genes,

and therefore configurations of traits, or types, may be even more likely to reflect emergent genetic processes.

Once the general etiology of the types is better understood, researchers will be able to search for specific environmental risk and protective factors that might contribute to the development of one type versus another. Armed with this knowledge, researchers can design interventions targeted at reducing the likelihood that individuals will develop into one of the two non-resilient personality types.

Developmental Sequelae

Hart et al. have done a great service to the field by documenting a wide range of developmental outcomes. Together with previous research in this area, we now know a considerable amount about the sequelae of each of the three personality types. However, thus far researchers have focused on academic outcomes and antisocial behavior, so we know relatively little about how personality type influences other outcomes, such as close relationships (with parents and romantic partners), peer relations, and prosocial behavior.

Moreover, in some cases researchers have yet to comprehensively test whether the consequences of the types are confounded by other differences among the types. Future studies need to tease apart those outcomes that are caused by personality types and those that are correlated with the types due to some third factor. For example, Hart et al. controlled for a wide range of variables (family income, maternal education level, quality of home environment, ethnicity, self-perceived academic competence, behavior problems) when they examined the effect of type on academic achievement.

Once it has been established that a type has a particular consequence, researchers need to identify the processes and mechanisms that mediate this effect. For example, Hart et al. show

that resiliency predicts positive achievement outcomes, but we know little about what mediates this effect. Is the link due to Resilients' better study habits, their healthy relationships with parents, peers, and teachers, or their ability to avoid deviant and anti-social behaviors? At a deeper theoretical level, one might postulate that the Resilients' presumed capacity to effectively regulate their impulses—controlling them where appropriate and expressing them when doing so is adaptive—might underlie more proximal mediators such as better study habits.

The search for mediators is particularly important given Hart et al.'s findings that personality type moderates the effects of interventions. As Kraemer, Wilson, Fairburn, and Agras (2002) have argued, the finding of a moderator begs the question of what mediates it. In this case we might ask, why do Resilients respond more favorably to Head Start? To address this issue, studies could measure the behaviors, thoughts, and feelings that occur during treatment for members of each personality type, and seek correlations between these variables and the outcomes of the intervention. Kraemer et al. (2002) provide a set of useful guidelines to help researchers seek and differentiate the moderators and mediators that contribute to outcomes of interventions like this one.

Toward a Deeper Theoretical Understanding of the Types

Although Hart et al. report a wide range of developmental findings, they do not propose a unifying theory or conceptual framework that could provide insights into the overall pattern. In fact, most previous research on personality types has been largely atheoretical, documenting a set of correlates rather than testing theoretical models about the way the types might be manifested in different developmental contexts. One potentially fruitful means of theorizing about the types would be to link them to extant theoretical models of personality. We already know a great deal about how the types relate to a descriptive model of personality, the Five-Factor Model, but we

know little about how they relate to more process-oriented models, particularly those that emphasize cognitive, emotional, and neurobiological mechanisms.

One obvious connection is with Block and Block's (1980) theory of ego resiliency and ego control. In contrast to descriptive dimensions, resiliency and control reflect an interrelated complex of regulatory processes within the individual. Although several studies have empirically linked the types to resiliency and control, the Blocks' broader theory of ego functioning has not been used to conceptualize the types or derive hypotheses. This theory could be particularly useful because it provides a rich source of information about the motives and regulatory mechanisms that drive personality functioning, and the way resiliency and control work together to shape an individual's behaviors, thoughts, and feelings (Block, 2002).

Like the Blocks' theory, personality models based on biobehavioral systems also move beyond classification of phenotypic behaviors and characteristics. Many of these models assume that there are three basic systems: a reward-sensitivity (or approach) system, a punishment-sensitivity (or avoidance) system, and a constraint system (e.g., Clark & Watson, 1999; Pickering & Gray, 1999). Can we draw theoretical links between the three types and these systems? It is possible that Undercontrollers are marked by low constraint, low punishment-sensitivity, and high reward-sensitivity; Overcontrollers have high constraint combined with high punishment-sensitivity and low reward-sensitivity; and Resilient individuals have some optimal configuration, perhaps marked by moderate constraint, relatively high (but not too high) reward-sensitivity, and relatively low (but not too low) punishment-sensitivity.

The three personality types may also be linked to Ainsworth's three attachment styles (Ainsworth, Blehar, Waters, & Wall, 1979). Resilients seem similar to securely attached children, Overcontrollers to Anxious/resistants, and Undercontrollers to Anxious/avoidants. A

future study could empirically assess these possibilities, and thereby connect each type to a well-studied domain with an extensive network of correlates.

More generally, the ultimate goal of typological personality research should be to build an explanatory taxonomy that is rooted in psychological and physiological mechanisms. Hart et al. take one large step toward this goal by providing evidence for a descriptive taxonomic system based on a set of replicable categories. The present monograph should be viewed as a call for continued research on these categories, and as providing the groundwork for exploring the internal generative mechanisms that underlie each of the types. We have outlined an ambitious agenda, but one that has the potential to provide considerable insights in personality development.

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