



LUND UNIVERSITY

The Person as a Focus for Research – The Contributions of Windelband, Stern, Allport, Lamiell, and Magnusson

Lundh, Lars-Gunnar

Published in:
Journal for Person-Oriented Research

DOI:
[10.17505/jpor.2015.03](https://doi.org/10.17505/jpor.2015.03)

2015

[Link to publication](#)

Citation for published version (APA):
Lundh, L.-G. (2015). The Person as a Focus for Research – The Contributions of Windelband, Stern, Allport, Lamiell, and Magnusson. *Journal for Person-Oriented Research*, 1(1-2), 15-33.
<https://doi.org/10.17505/jpor.2015.03>

Total number of authors:
1

General rights

Unless other specific re-use rights are stated the following general rights apply:
Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

Read more about Creative commons licenses: <https://creativecommons.org/licenses/>

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

LUND UNIVERSITY

PO Box 117
221 00 Lund
+46 46-222 00 00



The Person as a Focus for Research – The Contributions of Windelband, Stern, Allport, Lamiell, and Magnusson

Lars-Gunnar Lundh

Department of Psychology, Lund University, Lund, Sweden

Email address:

Lars-Gunnar.Lundh@psy.lu.se

To cite this article:

Lundh, L. G. (2015), The person as a focus for research – The contributions of Windelband, Stern, Allport, Lamiell, and Magnusson. *Journal for Person-Oriented Research*, 1(1-2), 15-33. DOI: 10.17505/jpor.2015.03

Abstract: At the end of the 19th century, Wilhelm Windelband proposed a distinction between nomothetic and idiographic research, which became highly relevant for the discussion of the nature of psychological science. During the 20th century, a number of writers (including William Stern, Gordon Allport, James Lamiell and David Magnusson) have criticized the focus on variables rather than persons, and populations rather than individuals, which has characterized much of psychological research. As a corrective, they have argued for the importance of various forms of idiographic or person-oriented research. The main purpose of this paper is to describe and discuss some of the arguments put forward by these writers, both with regard to their conceptualization of the person and with regard to how they picture idiographic or person-oriented research. A preliminary classification is suggested of different varieties of idiographic and person-oriented research, which differ in terms of how they relate to nomothetic research, and whether they focus on variables or on patterns. It is suggested that the contrast between variable- and person-oriented research may be dissolved into two different contrasts: (a) individual- versus population-focused research, and (b) variable- versus pattern-focused research.

Keywords: the concept of person, idiographic, nomothetic, psychography, traits, personal dispositions, idiothetic, holism, interactionism, dynamic system, person-oriented research

During the 20th century a number of researchers have argued for the importance of research focused on the individual person. The purpose of the present paper is to describe and discuss some of these arguments, in particular as put forward by William Stern, Gordon Allport, James Lamiell, and David Magnusson. The paper starts, however, with a discussion of Wilhelm Windelband's distinction between nomothetic and idiographic sciences. Although Windelband was a philosopher and not a psychologist, and although he did not focus much on the person in his writings, his way of differentiating between nomothetic and idiographic research has become highly relevant in discussions of the nature of psychological science.

The paper focuses on what these writers have to say about two kinds of questions. The first category of questions concerns the concept of person. What do we mean by a "person", and what does it mean to focus on the person in research? The second category of questions concern the distinction between nomothetic and idiographic research:

What does this distinction mean, and what is the relation between nomothetic and idiographic research? Is psychology a nomothetic or idiographic science, or both? The paper ends with a suggestion for a preliminary classification of different varieties of idiographic and person-oriented research.

Wilhelm Windelband: Idiographic versus Nomothetic Sciences

The German philosopher Wilhelm Windelband (1848-1915), who was professor of philosophy in Strasbourg from 1882 and in Heidelberg from 1903, is known primarily for his distinction between *nomothetic* and *idiographic* approaches to knowledge. This distinction was originally formulated in a speech that he held as rector of the University in Strasbourg in 1894. In this speech he discusses the classification of scientific disciplines, and criti-

cizes the often made distinction between natural sciences and humanities. As he formulates it: “it is at present customary to distinguish between natural sciences (*Naturwissenschaften*) and humanities (*Geisteswissenschaften*); in this form, I regard this distinction as unfortunate” (Windelband 1894/1998, p. 11). One reason for his criticism is that he finds it difficult to fit psychology into this scheme:

an empirical discipline of such significance as psychology is not to be accommodated by the categories of the natural sciences and the humanities; to judge by its subject, it can only be characterized as a humanity, and in a certain sense as the foundation of all the others; but its entire procedure, its methodological arsenal, is from beginning to end that of the natural sciences. (Windelband 1894/1998, p. 11)

As a replacement for the distinction between natural sciences and humanities, he proposes a distinction between *nomothetic* and *idiographic* sciences. This he describes as “a purely methodological classification of the empirical sciences” (Windelband 1894/1998, p. 12), based on the *type of knowledge* strived for: “The principle of classification is the formal character of the sought-for-knowledge. Some [disciplines] seek general laws, the other special historical facts.” (p. 12). And here he places psychology squarely within the nomothetic sciences, on the grounds that it seeks knowledge about general principles for psychological functioning.

Knowledge about the general, and knowledge about the particular

Basically, Windelband argues that the empirical sciences in their search for knowledge either seek *the general* in the form of laws of nature (nomothetic research), or *the particular* in the form of unique historical events (idiographic research). He emphasizes that “this methodological opposition classifies only the method and not the content of the knowledge itself” (Windelband 1894/1998, p. 13). One implication is that the natural sciences are not exclusively nomothetic but also contain idiographic disciplines. For example, although biology is largely a nomothetic discipline, research on evolution represents an idiographic discipline:

The science of organic nature... is of a nomothetic character insofar as it considers as its lawful form the ever-enduring types of living beings ... But viewed as a history of development, where it portrays the entire sequence of earthly organisms as a process of evolution or adaptation, gradually configured but once in the course of time... it is an idiographic-historical discipline. (Windelband 1894/1998, p. 13)

Windelband repeatedly makes it clear that, whereas nomothetic science seeks knowledge about abstract general principles or laws in the form of theories and mathematical formulations, idiographic science seeks *detailed knowledge of unique and concrete events*. But the idiographic sciences

do not only strive for a *description* of events in time, they also seek to *explain* these events. And here Windelband pictures an interaction between the nomothetic and idiographic sciences.

Explaining the particular: Applying nomothetic knowledge in idiographic research

Although the idiographic sciences seek a detailed knowledge of unique and particular events, they do not seek merely a description of these events but also an explanation of them. And here the nomothetic sciences enter the picture by contributing causal theories and laws that are necessary for the explanation of individual events. As Windelband formulates it,

the idiographic sciences... require, at every step, general theses, which they can borrow in their fully correctly established form only from the nomothetic disciplines. Every causal explanation of some or other historical process requires general notions about how things take their course at all. (Windelband, 1894/1998, p. 19)

Research within the idiographic sciences, in other words, does not consist only in a “pure” idiographic research (i.e., the search for a detailed and correct description of unique events) but also the *application* of concepts and theories from the nomothetic sciences in order to explain these unique events. The role Windelband assigns to psychological science in this scheme is that it should supply the historian with a knowledge of general psychological principles that may help to explain *why* humans acted in the way they did. That is, psychology is seen as a nomothetic science that may potentially be used by the historian to get a better understanding of historical events.

The word “potentially”, however, is important here, because Windelband points out (1) that psychological research has so far produced very little in the form of laws of psychological functioning that may be of actual help to the historian, and (2) that historians have so far managed quite well without psychological science, by means of common sense and intuition. This leads him to question whether the kind of research that characterizes psychology at that time (i.e., the 1890s) will be able to contribute any laws of psychological functioning that may help us to understand human life:

it is quite remarkable in this connection how lenient the historical sciences are, strictly speaking, in their demands upon psychology. The notoriously extremely incomplete degree to which, up until now, the laws of psychological life have yielded to formulation has never stood in the way of historians: through common sense, discretion and ingenious intuition, they have known just enough to understand their heroes and their activities. That sets one to thinking, and makes it appear very doubtful that the recently envisioned mathematical, natural-law conception of elementary psychological processes will deliver any noteworthy contribu-

tion to our understanding of real human life. (Windelband, 1894/1998, p. 19-20)

Psychology – a nomothetic and/or idiographic science?

To summarize, in terms of his classificatory scheme Windelband sees psychology as a *nomothetic* science, with the task of searching for knowledge about general principles (“laws”) of psychological functioning that may be used by *idiographic* human sciences (e.g., history) in their attempt to explain unique events (e.g., human action). It is interesting to note here that he pictures psychology “in a certain sense as the foundation of all the other [human sciences]” (Windelband 1894/1998, p. 11). Still, as seen in the quotation above, he doubts that the psychological research as it existed at that time, with its focus on elementary psychological processes, would be able to make any significant contribution “to the understanding of real human life”.

Being a philosopher and not a psychologist, Windelband does not discuss other possible paradigms of psychological research with a more holistic perspective on the person. Neither does he discuss the possibility of an *idiographic psychological* science. Let us apply his scheme to see what such an idiographic psychology would look like. Here it is important to note that, in terms of Windelband’s classificatory scheme, an idiographic psychological science may be expected to seek knowledge about *unique and particular psychological events*, in the form of a correct and detailed description of an individual person’s thoughts, feelings and actions under specified circumstances. Further, to *explain* that person’s thoughts, feelings and actions this idiographic psychology would make use of theories about people’s general psychological functioning obtained from nomothetic psychological science. An example would be a research-minded clinical psychologist or psychotherapist who first seeks to understand *descriptively* a client’s thoughts, feelings and actions under certain circumstances, and then tries to understand *causally* why these psychological processes took the course they did by applying a scientifically based theory of general psychological functioning.

Another possibility, however, which is not discussed by Windelband (1894/1998), is that idiographic psychological research (i.e., research on people’s individual experiences and behaviors under specific circumstances) could be used to search for regularities in human psychological functioning. Here the purpose would be to generate general psychological theories on the basis of a series of such idiographic investigations. Although Windelband does not consider this possibility himself, his distinction between idiographic and nomothetic research has proved valuable as it makes it possible to discuss such possibilities. His distinction is still very much alive in present-day psychological research – although it has also undergone several changes in this process.

William Stern: Knowledge about Attributes or Individuals

The German psychologist William Stern (1871-1938) is generally recognized as one of the most prominent psychologists of the early 20th century. He was professor of psychology at the University of Hamburg from 1916 until 1933, when he was forced into exile as a Jew by the Nazi regime. He fled first to the Netherlands and then to the US where he died in 1938. Among other things, Stern is known as a founder of differential psychology, as the inventor of the intelligence quotient (IQ), and as a pioneer in developmental research on children’s language. At the same time, Stern also had wider philosophical views on the nature of psychological science, both in terms of theory and methodology.

Stern (1911) describes a comprehensive approach to differential psychology, as containing a number of different forms of research. He argues that, until quite recently psychological research has been too one-sidedly focused only on the *general*, with the consequence that it has risked losing sight of the *individual*. As a welcome corrective against this bias, he notes that Windelband has set idiographic research *on equal terms* with nomothetic research. At the same time, however, he objects to Windelband’s way of seeing nomothetic and idiographic research as two separate types of *sciences*:

The distinction between nomothetic and idiographic approaches, however, should not be looked at as if it implies a strict separation into different kinds of scientific disciplines. It represents two standpoints, not two areas. Moreover, it is often necessary to shift between these two standpoints even within one and the same research unit, and occasionally the two approaches need to be combined. (Stern, 1911, p. 319, author’s translation)

Stern makes an important point when he argues that nomothetic and idiographic research do not represent different sciences, but different *approaches* that can be *combined* in various ways in one and the same scientific discipline. The implication with regard to psychological science is that we should not ask whether psychology is a nomothetic or idiographic science, but *in which ways these two approaches are combined in various forms of psychological research*.

In psychological science, it is customary to distinguish between general psychology and differential psychology – and general psychology, of course, represents a nomothetic approach to psychology. But what about differential psychology – is it to be seen as an idiographic approach? In his main treatise on differential psychology, Stern (1911) argued that differential psychology involves four different sub-disciplines: variation research (“Variationsforschung”), correlation research (“Korrelationsforschung”), psychography (“Psychographie”), and comparison research (“Komparationsforschung”). Of these, psychography rep-

resents the most idiographic form of research (see also Valsiner, 2015, this issue). The present part of the paper will focus first on Stern's views of these sub-disciplines, and then on some aspects of Stern's (1938) theoretical writings on the concept of *person*.

Knowledge about attributes versus knowledge about individualities

Stern (1911) characterizes the four sub-disciplines within differential psychology in terms of whether the *individual* ("Individuum") or its various attributes ("Merkmale") are in focus. He depicts this as a two-dimensional scheme, as seen in Figure 1, where the columns represent individuals (A, B, C, etc.) and the rows represent attributes (a, b, c, etc.).¹

	A	B	C	X	Y	Z
a							
b							
c							
•							
•							
•							
•							
•							
x							
y							
z							

Figure 1. Stern's two dimensions of individuals (A, B, C, etc.) and attributes (a, b, c, etc.), which is the basis for his classification of differential psychology into four sub-disciplines: (1) variation research, (2) correlation research, (3) psychography, and (4) comparison research. This is a simplified version of a figure in Stern (1911, p. 17).

- (1) *Variation research* focuses on the distribution of measures of a *single attribute* across *many individuals* (e.g., the attribute *a* across the individuals A-Z).

- (2) *Correlational research* focuses on the degree of co-variation among measures of *two or more attributes* across *many individuals* (e.g., the co-variation of the attributes *a* and *b* across the individuals A-Z).
- (3) *Psychography* focuses on a *single individuality* characterized in terms of *many attributes* (e.g., the individual *A* in terms of the attributes *a-z*).
- (4) *Comparison research* focuses on similarities and divergences in the attribute profiles of *two or more individualities* (e.g., a comparison between the individuals *A* and *B* in terms of their profiles of the attributes *a-z*).

It may be noted here that Stern (1911) changes terminology from "individual" ("Individuum") to "individuality" ("Individualität") when he describes the kind of knowledge that is strived for in psychography and comparison research. This is to emphasize that what is at stake is the *whole* individual ("ein Ganzes"), which cannot be reduced merely to a summary of its attributes, but must be seen as an "indivisible" whole (Stern, 1911, p. 19).

Nomothetic and idiographic knowledge in Stern's scheme. Stern (1911, p. 19) describes the two first sub-disciplines (variation and correlation research) as nomothetically oriented, and the two latter (psychography and comparison research) as idiographically oriented. This classification may be seen as a precursor to the present-day distinction between person-oriented and variable-oriented research. Stern (1911, p. 17) describes variation research and psychography as the two "extremes" – the former focusing on the variation of one specific attribute (i.e., one specific variable) across many individuals, and the latter focusing on one specific individuality (i.e., one specific person) in terms of a number of its attributes. Between these two "extremes", correlation research represents an attribute-focused (i.e., a variable-oriented) combination of both dimensions, whereas comparison research represents an individuality-focused (i.e., person-oriented) combination.

According to Stern (1911), differential psychology just as general psychology strives for nomothetic knowledge – although of a different kind. In differential psychology, for example, there is a search for knowledge of general principles concerning *the structure of individuality*. Stern here argues that the attributes of an individual are organized in some kind of structure, and although this structure may differ from one individual to another, it also may be assumed to possess some general characteristics. Among other things, he speaks of three basic sub-categories of attributes:

- (1) *Experiences* ("Phänomene"), which are momentary and can differ widely even *within* each individual.
- (2) *Acts*, which are also (like experiences) delimited in

¹ This can be seen as a simpler variant of Cattell's (1952) data box, with the time dimension excluded. For an illustration of Cattell's data box, see Molenaar's (2015) paper in the present issue, p. 35.

time, but still have more of *organization in time*, because they do not just represent “any chain of events, but a factor which gives these events a unitary direction in the moment, by subordinating them to a common goal” (Stern, 1911, p. 22, author’s translation). According to Stern, differences *between* individuals are seen more clearly in their acts than in their experiences.

- (3) *Dispositions*, which are not delimited in time, and which take us one step further in the direction of what is characteristic for the specific individual. “Dispositions” for Stern represent a very wide category, which includes talents and traits (the former representing potentialities and the latter actual characteristics), skills and capacities, as well as temperament, character and intelligence, among other things.

Here it may be noted that Stern, in fact, extends Windelband’s (1894/1998) definition of idiographic research (i.e., defined as research on individual *events*) when he characterizes psychography as the most idiographic form of psychological research, and at the same time defines it in terms of research on three different categories of attributes: *experiences, acts, and dispositions*. Whereas experiences can be categorized as events, Stern clearly states that acts cannot be reduced to a “chain of events”, as they possess more of an organization over time by their being subordinated to a specific goal. And dispositions are even further removed from discrete events, as they refer to relatively stable characteristics of the individual person. In Windelband’s scheme, experiences may be the focus of idiographic research, and possibly also acts, but definitely not dispositions.

This conceptual change in the meaning of the term “idiographic” probably occurs because the term “individual” enters psychological research not only (1) in referring to individual *events* (i.e., individual experiences and behaviors), but also (2) in referring to individual *persons*. When a term is needed for referring to research focused on the individual person, “idiographic” lies close at hand, in the absence of other alternatives.

Although Stern sees the description of a person’s dispositions as an example of psychography (i.e., a form of idiographic research), he sees it is a task for *nomothetic* research in differential psychology to clarify how these different kinds of dispositions are related to each other. Here he argues that the four sub-disciplines of differential psychology “acting in concert” can help to “draw a unified structure image of the individual”, in the form of a “hierarchical system” of dispositions (Stern, 1911, p. 27-28). As other examples of nomothetic strivings in differential psychology he mentions research on the contributions of heredity and environmental conditions to the development of the individual, and the nature and functions of “special variations” such as temperament, character, and intelligence

(Stern, 2011, p. 2-3).

Inter-individual and intra-individual variation. It is interesting to note that, although Stern’s definition of variation research (see above on p. 18) may suggest that he neglects the possibility of studying variation *within* the individual, this is not so. Stern (1911, p. 152-154) clearly describes how this kind of approach can be used both to study the variation between individuals (“Inter-Variation”) and the variation within individuals (“Intra-Variation”). On the other hand, he does not discuss how variation (and correlations) within the individual fits with his classification of differential psychology into four sub-disciplines. Obviously “intra-variation research” fits neither in the category of variation research, nor in the category of psychography, as these are defined by Stern.

The importance of psychography. It is notable that Stern (1911) attributes an important role to psychography:

In the science of psychology, which has so far been far too one-sidedly nomothetic, it is now time first of all to develop the idiographic approach; underneath actual psychology the *psychography* must enter: a description of individuals with regard to their mental life. (Stern, 1911, p. 4, author’s translation)

As Stern (1911, p. 327) formulates it, psychography differs from biography by starting, not top-down from some assumption about what is essential about a given individual’s life, but bottom-up “from the multiplicity of attributes” that characterize the individual and an “ordering of these from a psychological perspective” (p. 327). That is, the list of attributes obviously must be there before the psychographical description can start. As Stern puts it, the development of a scientific psychography “requires a farsighted preparatory work to construct a general psychographic scheme” (p. 353) in the form of a comprehensive list of attributes, systematically ordered in different areas. Stern compares the task of developing such a “general psychographic scheme” with the task of a botanist trying to develop a systematic classification of plants. In other words, the development of psychography, as Stern conceives it, depends on the existence of a classificatory scheme which obviously must depend on some kind of nomothetic psychological understanding. What we have here obviously is an interaction between nomothetic and idiographic approaches.

Comparison research. Comparison research, finally, which aims to compare the attribute profiles between individuals, is described by Stern (1911, p. 372) as being in an “embryonic” state, which is only natural as it cannot develop until psychography has produced sufficient material for it to make use of. What he has in mind here, however, is some kind of classification of individuals into “types”, and somewhat prophetically he considers it “not impossible” that the future may see the development of mathematical methods for accomplishing this (p. 357).

The concept of person

The concept of individuality or *person* held a central place in Stern's thinking from the beginning, and he explicitly emphasizes the distinction between persons and things: Whereas both persons and things consist of different parts, and function in accordance with these various parts, a person differs from a thing by constituting "over and above its functioning parts, a unitary, self-activated, goal-directed being" (Stern, 1906, p. 16, quoted from Lamiell, 2012, p. 379). According to Stern, there is a real danger that persons might be mechanistically reduced to things, and he therefore argues for a "critical personalism" against a mechanistic "impersonalism".

His last book (Stern, 1938) had the title *General psychology: From the personalistic standpoint*. The concept of person here occupies a central position, defined as "a living whole, individual, unique, striving toward goals, self-contained and yet open to the world" and as "capable of having experience" (Stern, 1938, p. 70). Transcending traditional body-mind dualism, and to avoid both mechanistic and dualistic thinking, Stern argues that the concept of person is "psychophysically neutral", and is primary in relation to the concepts of "mind" and "body":

Under the personalistic conception the ancient "mind-body" problem receives a new direction, and at the same time loses much of its former significance. The individual is not partly body and partly mind, but a person with the capacity for experience. He is a portion of a world that, although bounded on the outside, nevertheless continually exchanges substance and function with all other portions of the world; this is his corporeality. And he also has the capacity to reflect himself and the world inwardly; this is his mentality. The life of the person includes both; accordingly there is no experience and no capacity for experience that is not bound up with the physical aspect of life and with bodily functions. (Stern, 1938, p. 84)

Stern refers to the science of the human person in its totality and psychophysical neutrality as *personalistics* (p. 70). In his view, personalistics includes a number of specialized disciplines for studying the person, including "the biology, physiology, pathology and psychology of the person" (p. 70). That is, "personalistics" is seen as a wider area than psychology. Or in other words, individuality is not only a matter of psychological development – individuality is equally prominent at the biological level.

Gordon Allport: Searching for Lawful Regularities at the Level of the Individual

The American psychologist Gordon Allport (1897-1967) is generally regarded as one of the founding figures of personality psychology. He earned his Ph.D. at Harvard in 1922, and then received a fellowship that allowed him to

travel to Europe. During this time he spent some time at Stern's institute in Hamburg, which seems to have influenced his thinking in important ways. Nicholson (2003, p. 118) describes this as "a crucial period in Allport's intellectual development". Allport's theory of personality and his basic assumptions about research in this area was first presented in a book published in 1937, *Personality: A psychological interpretation*, and then updated in 1961 in *Patterns and growth in personality*. The present summary of Allport's thinking is primarily based on his book from 1961.

Seeking an equilibrium between the idiographic and the nomothetic

Allport (1961) emphasizes the uniqueness of each individual, and points out that this uniqueness holds true not only at the psychological but also at the biological level ("biochemical individuality"). Human individuality has its basis in the unique genetic equipment of each individual, which means that "no two human beings (with the possible exception of identical twins) have even the potentiality of developing alike, especially when to all these genetic differences we add the differences that will occur in the environments and experiences" (p. 5). This clearly points to the need for idiographic research methods, in the sense of methods focused on the individual person. At the same time, however, this genetic equipment is also the basis for certain gross features which are *common* to all human beings. A nomothetic goal in biological as well as psychological research accordingly is to formulate "general principles of biology and dynamic psychology for those processes that bring about uniqueness" (p. 10).

According to Allport, this striving for *both* an idiographic understanding of the individual person *and* a nomothetic understanding of general principles for the development, organization and expression of the individual is characteristic for the psychology of personality: "The psychology of personality is not exclusively nomothetic, nor exclusively idiographic. It seeks an equilibrium between the two extremes." (Allport, 1961, p. 21). To maintain this balance, we must "shuttle" between the idiographic and the nomothetic perspectives – "we must be ready to shift our attention rapidly from the particular to the general, from the concrete person to the abstract person, and back again." (Allport, 1961, p. 1)

Personality as a dynamic system

Allport conceives of personality as a dynamic system, consisting of a variety of different subsystems, in continual interaction with the environment. His brief and condensed definition describes personality as "the dynamic organization within the individual of those psychophysical systems that determine his characteristic behavior and thought" (Allport, 1961, p. 28). Central here is the holistic, *systemic*

view: Human personality is “one system, made up of various subsystems” (p. 8), where the individual’s heredity, physiology, experience, temperament, brain capacity, emotion, motives, memory, imagination, etc. “are bound together in one individual functioning” (p. 8). Central is also the *dynamic* perspective on this system as consisting of “a complex of elements in mutual interaction.” (p. 28)

It is also important to note that Allport, just like Stern, does *not* define this system in strictly psychological terms, but as a *psychophysical* system, which also includes the individual’s physiology: “personality is neither exclusively mental nor exclusively neural (physical). Its organization entails the functioning of both ‘mind’ and ‘body’ in some inextricable unity.” (p. 28)

This dynamic psychophysical system has an *organizing* role both for the person’s experiences, including his or her perception of the environment, and for the person’s behavior in relation to the environment. Allport speaks about this in terms of “determining tendencies”, which “exert a directive influence upon all the adjustive and expressive acts” (Allport, 1961, p. 29) of the individual. Highly important here is his view on how the individual person *connects with the environment*, both via perception and behavior. Two central concepts are *stimulus equivalence* and *response equivalence*:

To the individual a great many situations in which he finds himself are functionally equivalent (‘similar’ to him); and a great many separate kinds of acts are functionally equivalent in their intent and result (i.e., in their meaning to him). (Allport, 1961, p. 331).

This systemic organization is essential to the understanding of individual human beings – yet it is completely missed in research which focuses exclusively on individual differences in traits. As a representative of that form of research, Allport mentions Hans Jürgen Eysenck, and quotes Eysenck’s statement that: “To the scientist, the unique individual is simply the point of intersection of a number of quantitative variables” (Eysenck [1952], p. 18, quoted in Allport [1961], p. 8).

Allport is also critical of the kind of differential psychology that was outlined by Stern (1911), including Stern’s most idiographic sub-discipline: psychography. The list of attributes, which Stern described as the main instrument of psychography, is simply not adequate to describe individual personalities with their dynamic interactions among subsystems. As Allport states: “The fact of the matter is that psychography *cannot* synthesize. It can only string beads.” (Allport, 1961, p. 16)

Allport therefore calls for the development of idiographic research methods, including time sampling and refined case studies. Important here is that he does not only refer to methods for the description of unique and particular *events* (in accordance with Windelband’s definition of “idiographic” research), but also for the investigation of *lawful regularities* at the level of the individual:

the behavior of every individual is lawful in its own right... If you have an intimate friend, you may know very well why he behaves as he does, and be able to predict and partially to control his behavior in the future, just because you know the lawful regularities in his life. You do not need a knowledge of human nature in general in order to do so. (Allport, 1961, p.10)

In other words, if “nomothetic” means the search for lawful regularities, then the search for such regularities at the level of the individual represents a form of nomothetic research at the level of the individual. Although Allport does refer to this research as “idiographic” and not as “nomothetic”, he seems a bit uneasy about this terminology as he also introduces another term, “morphogenetic”, for this kind of research in his later writings (Allport, 1961).

Common traits and personal dispositions

The concept of “trait” is central in Allport’s theory of personality. Of great importance here is also his differentiation between (1) *common traits* and (2) what he 1937 referred to as “individual traits”, but which he 1961 had renamed as *personal dispositions*. Allport (1961) reserves the term “common traits” for traits measured by standardized personality tests, on which people can be *compared*. Personal dispositions, on the other hand, are *unique* for each individual, and cannot be measured by standardized instruments. Whereas common traits can be studied within an individual differences framework, personal dispositions cannot.

How, then, does Allport define the concept of “trait”? A trait, he says, is “a broad system of similar action tendencies existing in the person” (Allport, 1961, p. 337), or more precisely: “*a neuropsychic structure having the capacity to render many stimuli functionally equivalent, and to initiate and guide equivalent (meaningfully consistent) forms of adaptive and expressive behavior*” (p. 347). Although a person’s “stream of activity” is highly variable over time, it is possible to find a certain “constant portion” in this variability, “and it is this constant portion we seek to designate with the concept of trait” (p. 333).

In order for something to be established as a *common trait*, according to Allport, it has to be empirically demonstrated, by means of reliable personality tests or otherwise, that this characteristic is relatively consistent not only at the level of the individual, but also that “a whole population of people are reasonably consistent with themselves over time and in a range of situations.” (p. 343). As Allport (1961) notes, “hundreds of common traits have been established in this way, most of them showing a normal distribution in the population at large” (p. 356). As some examples he mentions neuroticism, extraversion, authoritarianism, and need for achievement.

According to Allport (1961), personality can be analyzed in terms of common traits “to a certain extent and with partial success” (p. 356). This kind of analysis, however,

works only as long as it can be assumed that individuals in the studied population make use of “*roughly comparable modes of adjustment*” (p. 339). On the other hand, if a certain personal characteristic is very unusual in the population, it does not make sense to develop a trait-like measure of it: “Failures to establish a common trait are enlightening. We would probably fail to find enough cases of quixotism, treasonableness, or kleptomania to justify scaling individuals with respect to these variables.” (p. 342)

Furthermore, although measures of common traits may provide information about individual differences in a population, it is not equally clear that they will give a fair or accurate picture of the personality of an individual person. As Allport (1961) argues, “common traits are to some extent artifacts of our method of forcing categories upon individual persons” (p. 340).

The identification of *personal dispositions*, on the other hand, is meant to give a more accurate reflection of an individual’s personality structure:

we are not condemning the common trait-approach. Far from it. When we wish to compare people with one another, it is the only approach possible. Furthermore, the resulting scores, and profiles, are up to a point illuminating. We are simply saying that there is a second, more accurate way, of viewing personality: namely, the internal patterning (the morphogenesis) of the life considered as a unique product of nature and society. (Allport, 1961, p. 360).

Allport assumes that some personal dispositions are of larger significance than others in an individual’s personality. Sometimes a personal disposition is so pervasive and outstanding in an individual’s life that “it deserves to be called a *cardinal* disposition. Almost every act seems traceable to this influence... No such disposition can be hidden, an individual is known by it, and may become famous for it.” (Allport, 1961, p. 365). Examples are different forms of ruling passions or obsessions.

According to Allport, however, it is unusual that a person is driven by only one such cardinal disposition. More commonly, a person’s life is characterized by a handful of *central* dispositions. Central dispositions are not as overwhelming as cardinal ones, but are still very salient in a person’s behavior. For example, they “are likely to be those that we mention in writing a careful letter of recommendation” (p. 365). An example would be honesty. Another example of a central disposition that may underlie a wide variety of behaviors in different situations is the craving for attention. On a still less conspicuous level, Allport speaks about *secondary* personal dispositions, which are characteristics seen only in certain circumstances.

The number of personal dispositions – which Allport also refers to as *major foci in the life of a person* – need not be very large. When Allport (1958) asked subjects to list the “essential characteristics” of some friend, 90% of them employed between 3 and 10 trait terms, the average number being 7.2 terms. Allport states the following hypothesis:

When psychology develops adequate diagnostic methods for discovering the major lines along which a particular personality is organized (personal dispositions), it may turn out that the number of such foci will normally vary between five and ten. (Allport, 1961, p. 367)

One example of an analysis of personal dispositions is a case study where Allport (1965) carried out a content analysis of 172 letters written by a woman, “Jenny”, when she was 59-70 years old. Allport used a combination of qualitative and quantitative analyses, including the use of 39 judges who listed the essential characteristics of “Jenny” as they perceived them, and a factor analysis of the frequency with which various tag words were combined in the letters. On the basis of the results, he concluded that Jenny displayed “a few unmistakable central dispositions in her life. She was highly jealous of her son; she was paranoid concerning her relations with women; she had a strong esthetic interest; and she was scrupulous in matters of money.” (Allport, 1961, p. 369)

Although Allport hypothesized that the number of central personal dispositions need not be large, he did not imply that it is an easy task to understand the functioning of an individual person in his or her interaction with the environment. On the contrary, he argued that this may be an exceedingly complex matter: “while the major foci of organization in a life may be few in number, the network of organization, which includes both minor and contradictory tendencies, is still elusively complex” (Allport, 1966, p. 9).

With his theory of personal dispositions, Allport takes the person-oriented approach a step further than Stern. This is so for two separate reasons. First, as has already been pointed out, Allport’s ambition is not only to describe or quantify the individual person’s attributes (as in Stern’s “psychography”) but to find lawful *regularities* at the level of the individual.

Second, and equally important, whereas common traits represent a subcategory of what Stern (1911) refers to as “attributes” in his differential psychological scheme, “personal dispositions” (“major foci in the life of a person”) fall entirely outside of Stern’s (1911) scheme. This is perhaps most clearly seen by looking at Figure 1 (see p. 18), where the attributes are represented by rows and must be possible to *compare* across individuals. There is no place for idiosyncratic personal dispositions in this scheme, because they cannot be compared across individuals.

To summarize, Allport’s thinking about lawful regularities at the level of the individual (including so-called personal dispositions) leads him to a kind of idiographic (person-oriented) research which is at the same time both (a) *more clearly separated* from the kind of nomothetic approach seen in research on individual differences (“common traits”), and (b) *closer* to nomothetic research, in the sense that it seeks *lawful regularities* in psychological functioning, although at the level of the individual.

Methodological developments after Allport

Allport's arguments for an increased research focus on the individual person did not meet with much positive response during his life-time. One main reason for this may have been the lack of any more impressive methodological developments. Some interesting developments of this kind have, however, taken place during the last decades. Two methods that Allport did suggest were time sampling and case studies – in both of these areas there have occurred developments.

Experience sampling. Experience sampling methods are today regarded as powerful tools for realizing a modern idiographic approach to personality research (e.g., Conner, Tennen, Fleeson, & Feldman Barrett, 2009). This is a methodology which goes under several different names, including *diary methods* (Bolger, Davis, & Rafaeli, 2003), *ecological momentary assessment* (Stone & Shiffman, 2008), *daily process research* (Tennen, Affleck, Armeli, & Carney, 2000), and *ambulatory assessment techniques* (Fahrenberg, Myrtek, Pawlik, & Perrez, 2007).

Experience sampling studies use various time spans, from a few days to several months, and can employ a range of designs (e.g., event-based designs, fixed time-based designs, and variable time-based designs) and technologies (including paper-and-pencil questionnaires, computerized personal digital assistants, electronic diaries, and mobile phones). Common to these is that data are collected on individuals' experiences in *natural settings*, close to the time when the person had these experiences, and on *repeated* occasions. In this way, multiple snapshots are obtained of people's daily experiences, which make it possible to identify patterns of experiences *within* the individual, and to test hypotheses about a single person.

Conner et al. (2009) describe a variety of *idiographic indices* that can be computed on the basis of data from experiential sampling, including (1) a simple mean or average, reflecting a reliable aggregate of that person's typical experience over the sampling period (e.g., how happy or sad a person feels on average over a period of time), (2) the standard deviation, quantifying the degree of variability around a person's mean (e.g., the degree of variability in a person's moods), (3) a within-person correlation, reflecting the co-variation between two variables for a given individual (e.g., the correlation between degree of depression and degree of anxiety over time within a person), (4) a time-based slope, reflecting change in a variable over time. Any index that captures some meaningful pattern at the level of the individual (e.g., skew and kurtosis) may be used.

Because this kind of research regards the *individual person* as the domain of analysis it can provide information about the dynamics of how individual persons think, feel, and behave, which may serve an explanatory function in personality research. This therefore looks like a clear example of a search for knowledge about *lawful patterns*

within the individual, in accordance with Allport's thinking. On the other hand, much research carried out with these designs use psychometric measures developed in research on individual differences (e.g., Big-Five measures of personality) – in this sense it does not follow Allport's focus on idiosyncratic personal dispositions.

Case study methodology. Developments have also occurred in case study methodology, for example in psychotherapy research, primarily by the development of single-case designs (e.g., Kazdin, 2011) and advanced forms of time series analysis (e.g., Molenaar & Campbell, 2009). But there are also other strivings for an increased rigor in case study research (McLeod, 2013). One example is the hermeneutic single-case efficacy design (Elliot, 2012) with its call for a rich data set (involving both quantitative and qualitative data collected repeatedly during treatment) and for a team of researchers to analyze the data from opposite positions. Another example is Stiles (2007) work on methodological principles for how to use case studies for theory-building purposes.

Illustrating the fact that Allport is still very much present in today's discussions of research methodology, Barlow and Nock (2009) published a paper with the title "Why can't we be more idiographic in our research?" A recent illustration of this approach in the field of psychotherapy research is a study where Boswell, Anderson and Barlow (2014) applied an advanced form of time-series analysis, developed by Molenaar and his co-workers, to a single case of a 64-year-old female patient with major depression and generalized anxiety disorder who underwent transdiagnostic cognitive-behavior therapy. Among other things, the authors examined temporal patterns of three process variables (mindfulness, cognitive reappraisal, and emotion avoidance), and the relationships between these process variables and depression and anxiety over time. Analyzing the data with univariate and multivariate time series analyses, they found that changes in mindfulness and in reappraisal were associated with changes in depression and anxiety, and that changes in the former (i.e., mindfulness and reappraisal) were associated with *subsequent* changes in the latter (i.e., depression and anxiety) for a lag of 3-4 days, whereas the converse was not observed. The authors conclude that this kind of idiographic research can help elucidate important processes of change in psychological treatment.

Again, this is an example of search for knowledge about *lawful patterns at the level of the individual* which relies on psychometric measures developed in research on individual differences (e.g., measures of anxiety, depression, mindfulness and reappraisal), rather than any idiosyncratic measure of "personal dispositions" in Allport's sense. The question may be asked how much is won by following Allport in his search for idiosyncratic "personal dispositions". Maybe psychometric measures developed in research on individual differences are quite sufficient for the purpose of identifying lawful patterns within the individual, for example in studies that use experiential sampling or

single-case designs?

Two kinds of objections might be raised here: (1) Idiographic studies of this kind may still be quite focused on common traits in the form of single variables, and may therefore miss the *patterning of the individual* which Allport was interested in. (2) Even if researchers try to study this patterning by focusing on a *combination* of such traits, it may be questioned whether this will fully reflect the individual's pattern. Allport comes close to a discussion of the latter at least in one passage:

For example, by common trait methods, we find that Peter stands high in *esthetic interest* and *anxiety*, but low in *leadership* and *need-achievement*. The truth is that all these common traits have a special coloring in his life, and – still more important – they interact with one another. Thus it might be more accurate to say that his personal disposition is a kind of *artistic and self-sufficient solitude*. His separate scores on common traits do not fully reflect this pattern. (Allport, 1961, p. 359)

A question that might be discussed here is: Even if Peter's separate scores on the trait measures do not fully reflect his unique personal disposition, maybe the *pattern* of these scores might reflect his personal disposition sufficiently well to be used for research purposes?

James Lamiell's idiothetic approach to personality

James T. Lamiell, professor of psychology at Georgetown University, earned his Ph.D. at Kansas State University in 1976. His relevance to person-oriented research is twofold: First, in 1981 he published an article with the title "Toward an idiothetic psychology of personality", where he suggested a new paradigm for personality research. Second, he has written extensively about theoretical and historical issues relevant to the development of person-oriented research. Among other things, he has translated Windelband's (1894/1998) original paper on nomothetic and idiographic research into English, and has written books and articles about Stern's work (Lamiell, 2003, 2010a,b, 2012, 2014)

As part of his writings, Lamiell has also been strongly critical of the individual differences paradigm as an approach to research on personality.

The main purpose of the present section is to provide a brief description and discussion, first of Lamiell's idiothetic approach to personality research, and then his critique of trait research. Finally, an illustration is also given of his more conceptual-philosophical writings relevant to the concept of person.

The idiothetic approach

Lamiell is highly critical of the individual differences

paradigm as an approach to research on personality. The target of his critique is the assumption that research on individual differences in traits "will ultimately lead to the isolation of those (presumably few) attributes that are necessary and sufficient to describe the personality of any given individual" (Lamiell, 1981, p. 278). As Lamiell argues, this assumption is fundamentally mistaken, because knowledge about *individual differences* simply does not represent knowledge about *individuals*:

to the differential psychologist, the concepts of reliability, validity, and generalizability refer to properties of the individual differences constructs, and one establishes these properties with data aggregated *across* persons. To address the basic problem of empirical personality description, however, an investigator must be able to detect temporal and transsituational consistencies *within* persons, that is, at the level of the individual. (Lamiell, 1981, p. 280).

As an alternative framework to the individual differences paradigm, Lamiell (1981) suggests an approach that he refers to as *idiothetic*. As the term implies, the idea is to combine the idiographic and the nomothetic approach within one paradigm: an idiographic approach to *personality description*, combined with a search for nomothetic principles of *personality development*. This is an approach which disregards individual differences as irrelevant, and which focuses entirely on comparisons over time *within the individual*. First, he argues that

an individual's personality is best described in terms of information about what that person tends to do – not in direct contrast with what others tend to do, but in direct contrast with what that person tends *not* to do but *could* do" (Lamiell, 1981, p. 281).

He therefore argues for the development of personality measures that compare the individual with him/herself over time, without any comparison to other individuals. Such idiographic measurement, according to Lamiell, "provides an investigator with a means of empirically identifying those qualities or attributes that are manifested by an individual with some degree of regularity or consistency over time and across situations" (p. 283), which is "the essence of personality description" (p. 283).

Second, Lamiell (1981) rejects the potential criticism that such an approach "would ultimately undermine the overriding objective of establishing general principles of personality" (p. 285). The establishment of general principles of personality, Lamiell argues, does *not* need to rely on data about individual differences. What *is* of definite interest to the personality investigator, however, is data about basic processes of personality development, and such data are gathered *within individuals*. As one possible means of testing hypotheses about such processes, he suggests time series analysis. Further, he argues that if such hypotheses are *repeatedly confirmed* in data from a series of single individuals, this can be used to accumulate empirical sup-

port for general principles of personality. Furthermore, this would, according to Lamiell, represent nomothetic knowledge in a way that is much closer to the concept, as defined by Windelband, than research on individual differences. As a name for this combination of idiographic measurement and repeated single case studies to establish general principles of personality, Lamiell suggests the term “idiothetic”.

Programmatic research of the type just described would be idiographic in the sense that it would be predicated on an idiographic measurement rationale and would literally involve the study of single individuals over time. It would also be nomothetic, however, in that it would seek to confirm, *across* individuals, the applicability of certain basic principles to an understanding of theoretically relevant phenomena. In a word, the research would be *idiothetic*. (Lamiell, 1981, p. 286)

Lamiell can be said to take Allport’s model a step further by the ambition not only to establish lawful principles of functioning *at the level of the individual*, but also to use idiographic research to find general principles applicable to *human beings in general*. Although Lamiell’s (1981) paper was characterized by Rorer and Widiger (1983) as “the single most important paper” (p. 448) on theoretical issues in personality psychology that had been published during recent years, however, it seems to have had little influence on personality research. Also, during the last decades Lamiell has concentrated his efforts more on theoretical questions in the study of personality, and on studies of the history of psychology, than on the empirical development of his idiothetic approach.

Lamiell’s critique of trait research

Lamiell’s critique of the traditional trait model for research on individual differences is much more sharply formulated than Allport’s. For example, Lamiell (1986) states that “this unwavering commitment to the assessment and study of individual differences... is *the* single greatest impediment to theoretical advances within the field” (p. 98). Also, according to Lamiell, the assumption that individual differences research is *nomothetic*, in the sense that it leads to general psychological knowledge, represents a major misunderstanding. In fact, he argues, this kind of research gives *neither* idiographic nor nomothetic psychological knowledge:

the major problem with individual differences research as a framework for the scientific study of personality is not that such research fails to yield knowledge that is sufficiently ‘idiographic’ in nature... Rather, the most serious problem... is that it does not yield knowledge that is *nomothetic* in nature either. (Lamiell, 1986, p. 104)

In contrast, Allport (1961, p. 360) valued research on individual differences, and argued that it is “up to a point illuminating”, although it is not “the most accurate way” of

viewing personality. As Allport put it in an autobiographical book chapter, “I never implied that differential psychology was irrelevant to the psychology of personality, but I did insist that our science was at fault for neglecting the problem of patterning.” (Allport, 1967, p. 16). It also seems clear that Allport (1962) regarded research on individual differences as a form of nomothetic research, which may lead to general psychological knowledge – although not about individual persons.

It is possible that the latter disagreement may be, at least partly, terminological. What Lamiell (1998) objects to is the assumption that research on individual differences can lead to nomothetic knowledge about individual *persons*. On the other hand, he admits that such research may well lead to nomothetic knowledge about *aggregates* of individuals. Lamiell’s radical conclusion is that “modern trait ‘psychology’ is much less a *psychology* than a *demography* exploiting a psychological vocabulary” (Lamiell, 1998, p. 34).

An alternative to Lamiell’s view, however, is that it is quite meaningful to speak of psychological knowledge *both* at the population level and at the level of the individual. For example, research about psychological risk factors for the development of various kinds of psychiatric disorders may be carried out at the population level, but does this mean that it should not count as meaningful psychological knowledge? Even if this kind of knowledge cannot be generalized to any specific individual, it may still be quite useful psychologically (e.g., for prevention purposes). The implication would be that trait research is a potentially quite important form of nomothetic psychological research, *despite* the fact that the typical results of such research do not contain any information about individual persons.

Lamiell is certainly right when he argues that knowledge about individual differences does not represent knowledge about individual persons. His theoretical writings during the last decades also include a number of convincing illustrations of why it is not possible to generalize from the level of populations to the level of the individual (e.g., Lamiell, 2000, 2007, 2013). This is consistent with Molenaar’s (2004) arguments, on the basis of the classical ergodic theorems in mathematics, that “only under very strict conditions – which are hardly obtained in real psychological processes – can a generalization be made from a structure of interindividual variation to the analogous structure of intraindividual variation” (p. 201). But does this mean, as Lamiell suggests, that research on individual differences is *irrelevant* to knowledge about individual persons? For example, is it not still possible that psychometric instruments developed in research on individual differences can be used in studies of change and development in individual persons? For several reasons, it may be argued that psychological knowledge should be seen as encompassing both the level of the individual and the level of populations (cf. Asendorpf, 2015, in this issue).

Conceptual issues

One of Lamiell's general conclusions is that the development of psychology has suffered from a too strict separation between psychology and philosophy: "psychology has suffered intellectually as a result of its widespread devaluation of theoretical/conceptual/philosophical work, and... a renewed appreciation of the importance of such work to scientific psychology's overarching mission would be beneficial to the discipline" (Lamiell, 2013, p.1).

One example is his discussion (Lamiell, 2013, 2014) of the tendency of some researchers in neuroscience to dispense with the concept of the person, and even with the entire discipline of psychology. Gazzaniga (1998), for example, explicitly argues that psychology is "dead", and should be replaced by brain science. According to Gazzaniga's view, people's mental life reflects the action of a large number of "neural devices" that are built into the brain and account for all our actions and experiences. The implication is that modern neuroscience has rendered the concept of a unitary person altogether dispensable. This may be criticized as representing a kind of confusion which Bennett and Hacker (2003) have labeled the *mereological fallacy*²:

It is only by the dubious grace of what Bennett and Hacker (2003) called the "mereological fallacy" that we can fail to understand that a neural device cannot be "clever" any more than it can be obtuse. Neural devices neither "manage" nor mismanage. They neither "interpret" nor misinterpret, and they neither "create" nor dispel illusions. The conceptual-philosophical problem here, Bennett and Hacker (2003) argued, lies in the failure to understand that such attributions are properly made only to psychophysically unitary whole persons, and the empirical problem for cognitive neuroscientists, Bennett and Hacker (2003) insisted, is to reveal how neural devices function when whole persons display these attributes. (Lamiell, 2013, p. 8)

David Magnusson's holistic-interactionistic approach

David Magnusson (born 1925) was professor of psychology at Stockholm University from 1969 to 1992. He is most known for his contributions to longitudinal research and for his development of a holistic-interactionistic approach to developmental research. According to Magnusson (2001, 2012), real progress in scientific work requires (1) a theoretical framework that is adequate to the phenomena of interest and that makes possible "correct analyses of the characteristic features of the domain under consideration" (Magnusson, 2012, p. 26), and (2) the use of

methodological tools that match the nature of the phenomena that are to be investigated. Because the person is seen as a holistic system, certain consequences follow both with regard to the kind of theory that is needed, and the nature of the methodologies that are fit to study this system.

The need for an integrative theoretical framework: Holism and interactionism

First of all, psychological science is in need of an integrative theoretical framework for the understanding of individual human beings and their development. Magnusson's ambition may not have been primarily to contribute to the development of the *details* of such a theoretical framework, but rather to draw an outline of what must *characterize* such a theoretical framework if it is to capture the phenomena of interest in psychological science. That is, his writings in this area can be seen as *meta-theoretical* rather than theoretical in any more specific sense:

we need a general model for the human being – a model that can serve as a common framework for designing, implementing, and interpreting results from studies on specific developmental issues... Such a framework must enable us to synthesize knowledge about the integrated individual, functioning and developing as an intentional agent in his or her world. (Magnusson, 2001, p. 158)

A basic premise in Magnusson's writings is the *holistic* view that the individual must be studied as an integrated indivisible whole. The neglect of this view has led to a fragmentation of research which "has had a hampering effect on real progress in psychology as a scientific discipline" (Magnusson, 2012, p. 26). Essential to Magnusson's approach is also that this *holism* is combined with *interactionism*. That is, even though the individual person has to be seen as an integrated indivisible whole, we also have to take into account that the individual (1) is in constant interaction with the environment, and (2) consists of a number of different systems that interact at various levels.

This is consistent with Allport's conceptualization of the individual person as a dynamic system, consisting of a variety of psychophysical subsystems, in continual interaction with the environment. Whereas Allport, being primarily a personality psychologist, emphasizes the *functioning* of this system rather than its *development*, however, Magnusson adds more of a developmental perspective with a focus also on how the system *changes*.

The integrated nature of developmental processes implies that they proceed and develop as irreducible wholes. This characteristic holds at all levels of the total person-environment system, from the cellular level upwards. At each level, a system derives its characteristic features and properties from the functional interaction of the elements involved—not from the effect of each isolated part on the whole. At the level of the individual, each aspect of the structures and processes that are operating (in the brain and

² In philosophy and mathematical logic, *mereology* is the study of parts and the wholes they form. In General Systems Theory it refers to formal work on system decomposition and parts, wholes and boundaries.

the physiological system, perceptions, plans, values, goals, motives, conduct, etc.), as well as each aspect of the proximal and distal environment, acquires meaning from its role in the integrated functioning of the total individual. A particular element derives its significance not from its structure, but from its role in the system of which it forms a part. (Magnusson, 2011, p. 155)

An important consequence of this holistic-interactionistic framework is that developmental processes are by necessity idiosyncratic, and must therefore be studied at the individual level. Because an individual's developmental processes are characterized by continuous and "highly idiosyncratic" forms of adaptation, transformation, and synchronization it "must, in the final analysis, be analyzed at the level of the individual" (Magnusson, 2001, p. 160).

The importance of matching methods to the phenomena of interest

A second recurring theme in Magnusson's writings is the need to adapt the method to the phenomena that are under investigation:

any method for data collection is neutral until it is applied to the study of a specific phenomenon. No method is more scientific than any other *per se*. Any method can be wrong if misapplied. What determines the best scientific method for the study of a specific psychological problem is the extent to which it contributes to answers which are relevant and generalizable to real life situations. (Magnusson, 1992, p. 8)

This call for methodological pluralism, and the adaptation of the method to the research question, may seem self-evident and maybe even unnecessary to state explicitly. However, the history of psychological research provides too many examples of rigidity in methodological thinking to make this advice redundant. The same goes for statistical analyses, and Magnusson (1992, p. 8) points out that it "is easy to find illustrations to how we are seduced by technical, methodological sophistication when we have to choose among statistical procedures", and that unfortunately "the scientific value of empirical studies is often evaluated more with respect to the sophistication of the methods used for data treatment than with reference to how well the statistics match the character of the phenomena under study." (Magnusson, 1992, p. 8)

As examples of statistical methods that have come to be used stereotypically in research on personality and development Magnusson (1992) mentions linear regression models and structural equation models (SEM). He reports from his own experience that it "is almost inevitable that someone asks why I have not used SEM when I present results from a longitudinal research programme I have conducted over a number of years" (p. 9). When this question is raised on these occasions, he says, it is seldom with reference to the character of the phenomena that are under study, but merely reflects a stereotype. His critique here is

not primarily aimed specifically at linear regression models or SEM – the main point is that any method that becomes popular runs the risk of being over-utilized and applied more or less mechanically also to research questions which it is not suited for.

Another expression of the insufficient attention to the actual character of the phenomena of interest is the tendency to mimic physics in the search for "laws" that can be expressed in precise mathematical terms. According to Magnusson (2001, 2003), laws from physics probably do not represent a good model for psychological science; instead of precise "laws" of this kind we should search for operating *principles* and *mechanisms* of the kind that characterize various forms of successful biological research (Magnusson, 2001, 2003).

Among the methodological tools from the natural sciences that Magnusson thinks may be useful in a psychological developmental science are *nonlinear dynamic models*. But here it is also important to adapt these models to the specific nature of psychological phenomena:

as with all methodological tools, the proper application of nonlinear dynamic models too requires strict consideration of the nature of processes being studied. Clearly, certain similarities exist between the structures and processes studied in the natural sciences, in which the nonlinear dynamic models were originally developed, and those investigated in psychological research. However, there are also essential differences, particularly when we focus on the functioning of the integrated human organism. At that level, a fundamental characteristic and guiding element in an individual's functional interaction with the environment is consciousness and intentionality, which are linked to values, goals, and emotions – and the fact that the individual learns from experience. These circumstances must be taken into account when methods derived from the study of dynamic, complex processes in the physical world are applied to the planning and implementation of empirical research on developmental processes. In this respect we have more to learn from biological than from physical sciences. (Magnusson, 2001, p. 161)

Generally, the holistic and interactionistic nature of individual human beings means that research strategies, measurement models and statistical methods that *match* these characteristics must be used. Normally it is not adequate to focus merely on single variables, but the effects of single variables must be seen in the context of other factors that are operating concurrently.

Accordingly, the normal functional role of a single variable in the developmental processes – such as aggression, hyperactivity, or a certain stress hormone – has to be finally investigated together with other factors operating concurrently. Only the integrated individual, not single variables, remains distinct and identifiable across time. (Magnusson, 2001, p. 155)

All too frequently, Magnusson argues, statistical models and methods that do not match the character of the process

under investigation are applied to the study of developmental processes. One example is the confusion that researchers sometimes show between two different meanings of the concept of “interaction”: on the one hand, interactions *at the level of the individual* (e.g., between the person and the environment, or between various subsystems within the person), and on the other hand, statistical interaction *at the group level*:

A striking example is when holistic, psychobiological models emphasizing the functional interaction of working elements in individual developmental processes are refuted with reference to results from studies applying models for statistical interaction at the group level. The statistical interaction model for analysis of data at the group level does not in any sense match the model for dynamic, complex, and adaptive interaction of operating psychobiological elements at the individual level. The joint use of the term ‘interaction’ is not enough to justify the application of a statistical interaction model to investigate functional interaction at the individual level. (Magnusson, 2001, p. 158)

The person-oriented approach

Magnusson (1999) describes the *variable approach* and the *person approach* as two useful (contrasting but complementary) tools in empirical research, which are adequate for different types of research questions. As formulated by Magnusson, the distinction is partly similar to that formulated by Stern (1911) and as depicted in Figure 1 above:

In the “variable approach” each single datum for individual A on a certain latent dimension *k* derives its psychological meaning from its position relative to positions for other individuals B, C, D, and so on, on the same dimension. In the “person approach”, each single datum for individual A derives its psychological meaning from its place in a pattern of data for the same individual, representing his or her positions on the latent dimensions *k, l, m, n*, and so on, which are operating simultaneously in the system under investigation. (Magnusson, 1999, p. 357)

Whereas the variable approach seeks knowledge about *individual differences*, the person approach seeks knowledge about *internal patterns* within the individual person. In the variable approach, “the lawfulness of processes in individual functioning and development is studied in terms of statistical relations between variables across individuals *at group level*” (Magnusson, 1999, p. 235). In the person approach, on the other hand, the lawfulness in individual functioning and development is studied in terms of patterns of values on a set of variables *at the level of the individual*.

So far, this looks very much like Stern’s psychography – however, the focus in Magnusson’s work is much more on what Stern labeled “comparison research” than on psychography. That is, an explicit aim is to *categorize* individuals on the basis of *similarities* in these patterns of functioning.

Magnusson’s approach has been further developed and specified, both theoretically and methodologically, in Lars Bergman’s person-oriented research (e.g., Bergman & Andersson, 2010; Bergman & Magnusson, 1997). This research focuses explicitly on “the person as a *Gestalt*” (Bergman & Magnusson, 1997, p. 293), in the form of typical patterns, their development, and their connections across domains.

As formulated by Bergman and Andersson (2010), although this approach usually uses data in the form of a Person X Variable matrix, “the variable values achieve their importance as parts of an indivisible pattern; they have no separate status; it is the profile of scores that matters” (p. 157). That is, here the *pattern* – not the variable – becomes *the analytic unit*. Variables enter the picture only as components of these patterns, but these components have no meaning in themselves:

It is sometimes objected that even the person-oriented approach is variable oriented because, for instance, in many of its applications, variables are used to construct profiles as *patterns* of operating factors, which are then used in the statistical analysis. However, variables included in such an analysis have no meaning in themselves. They are considered only as components of the pattern under analysis and interpreted in relation to all the other variables considered simultaneously; the relevant aspect is the *profile* of scores. (Bergman & Magnusson, 1997, p. 293)

In other words, a certain value on a variable may mean different things, depending on the pattern of which it is part – a narrow focus on variables, and the association between variables, fails to take this into account, and thereby does not match the person considered as a holistic system.

This means that *patterns* within the individual occupies a more central place here than in other varieties of research that are focused on the individual person. In fact, research at the level of the individual may be quite *variable-oriented*, to the extent that it takes the variable as the analytic unit. A *fully person-oriented approach*, in Bergman and Andersson’s (2010) sense, does not only focus on the individual person, but also on patterns within the individual – which is logical on the assumption that the person is a holistic system:

just because the individual is focused on and the results apply at a disaggregated level do not suffice for an approach to be called fully person-oriented in the sense of this article. To a reasonable extent, the integrity of the system under study must also be retained. (Bergman & Andersson, 2010, p. 162)

Retaining the integrity of the system requires a focus on patterns, both momentary patterns (“synchronic”) and patterns over time (“diachronic”). With regard to the latter, this implies a focus on “the process as a dynamical system in contrast to a static linear model” (Bergman & Andersson, 2010, p. 161), and an interest in collecting intensive process-related data. The focus on patterns, however, also has

a more nomothetic aspect – the search for *types* of patterns:

Although there is, theoretically, an infinite variety of differences with regard to process characteristics and observed states at a detailed level, there will often be a small number of more frequently observed patterns (common types), if viewed at a more global level. The assumption is made both intraindividually (viewed over time for the same person) and interindividually (for different individuals at the same time or over time).’ (Bergman and Magnusson, 1997, p. 293)

These postulated types are assumed to be “somewhat analogous to the ‘attractors’ studied in dynamical systems research” (Bergman & Andersson, 2010, p. 157). A number of methods have been developed for the purpose of identifying types of patterns, which Bergman and Magnusson (1997) classify into descriptive methods (e.g., cluster analysis, configural frequency analysis) and model-based methods (e.g., latent class analysis, latent profile analysis).

Discussion

To summarize, Windelband, Stern, Allport, Lamiell and Magnusson have all contributed in important ways to lay the foundation for person-oriented research in psychology. Basically, they have done so in at least two ways: (1) by outlining basic aspects of the concept of person, and (2) by elaborating on the notion of idiographic or person-oriented research within psychological science

Stern introduced a holistic conception of the person as a unique psychophysical individual, who needs to be studied both at a biological and a psychological level. Allport developed this conception in an explicitly system-theoretic direction by depicting personality as a dynamic system, consisting of a variety of psychophysical subsystems, in continual interaction with the environment. Magnusson further updated this systemic conceptualization from a developmental perspective. Lamiell points to the conceptual confusion involved, for example, when some representatives of neuroscience want to dispense with the notion of the individual person altogether.

Windelband played an important historical role by formulating the distinction between nomothetic and idiographic sciences, and for setting these two forms of research on equal terms. Stern further refined Windelband’s distinction by clarifying that nomothetic and idiographic research do not represent different *sciences*, but rather different *approaches* that can be *combined* in various ways in one and the same discipline. The implication with regard to psychological science is that we should not ask whether psychology is a nomothetic or idiographic science, but in which ways these two approaches may be combined in various forms of psychological research.

At the same time, the term “idiographic” partly changed its meaning when it was introduced into psychology. It is important to remember that Windelband defined idiographic research as the study of *individual events*. In the psycho-

logical literature, however, there is a tendency to apply the term “idiographic” to all research on *individual subjects*, whether the focus is on individual events (e.g., an individual subject’s individual thoughts, feelings or behaviors) or not. This is seen, for example, in Stern’s “psychography” – the study of individuals in terms of their *attributes* – which he sees as the most idiographic form of psychological research. Stern speaks of three basic subcategories of such attributes: *experiences*, *acts*, and *dispositions*. Of these, only experiences can be unambiguously classified as *events*, whereas dispositions cannot, and acts occupy a kind of middle-ground. This means that, in Windelband’s sense of the term, all forms of psychography do not represent idiographic research.

The same goes for Allport’s search for “personal dispositions”, which are unique for each individual, but which refer to *lawful regularities within the individual*, rather than individual events. In terms of Windelband’s definition, research aiming at this *type of knowledge* might count as nomothetic rather than idiographic. Because the analysis is carried out at *the level of the individual*, however, it is often referred to as “idiographic” in the psychological literature.

Stern’s distinction between knowledge about *attributes* and knowledge about *individuals* may be seen as an early precursor of the present-day distinction between person-oriented and variable-oriented research. Importantly, in Stern’s model the *same* attributes are included in both kinds of research – the only difference being whether the focus is on these *attributes across individuals* or on *individuals characterized in terms of these attributes*. To the extent that it takes patterns of such attributes as the analytic unit, Stern’s notion of “comparison research” represents a precursor of the type of person-oriented research that is today carried out with methods such as cluster analysis.

Allport took a further step in the development of person-oriented research by making a sharper distinction than Stern between research on individual differences (which focuses on “common traits”) and research on *the internal structuring of the individual’s personality*. In Allport’s model, the latter kind of research gets a more independent role in relation to research on individual differences. The explicit purpose is to obtain knowledge about *lawful regularities* in the individual person’s functioning – that is, the *knowledge claims* are nomothetic, although the *level of analysis* is that of the individual person. It may be questioned, however, to what extent the seeking of this kind of nomothetic knowledge at the level of the individual necessarily requires a search for idiosyncratic “personal dispositions” in Allport’s sense. The kind of idiographic research developed after Allport often makes use of psychometric instruments developed in research on individual differences, in combination with new methodologies like experiential sampling and single-case designs, and statistical methods such as multilevel modeling and advanced forms of time-series analysis. At the same time, it seems that this research may miss the “patterning of the individual” that

was emphasized by Allport – in this sense, at least some of this idiographic research may be seen as *variable*-focused rather than *pattern*-focused.

Lamiell makes an even more radical differentiation than Allport between research on individual differences and research on personality, and coins a new term (“idiothetic”) for research which combines a focus on idiographic description with a nomothetic search for general principles of individual development. Lamiell is highly critical of traditional research on individual differences. Here he argues, among other things, that knowledge about individual differences (1) does not represent knowledge about individuals, (2) has no relevance to personality psychology, and (3) is not psychology but rather “a *demography* exploiting a psychological vocabulary”. Although the first argument seems quite correct, the latter two are open to discussion. It may be argued that psychological science involves research *both* at the individual level and the population level.

Magnusson, finally, advocates a form of person-oriented research that involves a focus both on the individual person and on patterns within the person. Further, his approach also extends this “double” person-focus (“double” in the sense that it is focuses on *individuals* rather than populations, and on *patterns* rather than variables) into searching for categories of individuals with similar patterns – thereby being more similar to Stern’s “comparison research” than to Stern’s “psychography”. This also points to the important observation that research at the level of the individual may well be *variable*-focused rather than pattern-oriented, if it focuses, as usually is the case, on the variable as the analytic unit and does not analyze patterns of variables as undivided units. If the person is considered as a holistic psychophysical system along the lines of Stern, Allport and Magnusson, however, a truly person-oriented research requires a focus *both* on the individual person *and* on holistic patterns of functioning within the person.

Here it should also be noted that a person-oriented approach need not focus on *a single individual* – it can as well be applied to *interpersonal* processes between individuals. For example, sequential patterns of behaviors and experiences in two interacting individuals can be studied idiographically and be categorized in terms of types of interpersonal patterns. An example is the study by Aunola, Tolvanen, Kiuru, Kaila, Mullola, and Nurmi (2015, this issue), which includes a person-oriented analysis of patterns of day-to-day emotion transmission in father-child dyads, and classifies these into four types of interpersonal patterns.

Altogether, the writings by Windelband, Stern, Allport, Lamiell and Magnusson describe a number of different varieties of idiographic and person-oriented research. To summarize the different ideas put forward above, we may distinguish between the following different varieties of idiographic and person-oriented research:

- (1) *Pure idiographic description* of events. This is the kind of idiographic research originally pictured by Windel-

band. Applied to psychological research, this means a detailed verbal description of an individual’s thoughts, feelings, and behaviors under specified circumstances. No quantification is required.

- (2) *Pure idiographic description, combined with the application of nomothetic theories to explain these events.* This variety is also described by Windelband. An example from psychology would be when a clinical psychologist first seeks to understand *descriptively* a client’s thoughts, feelings and actions under certain circumstances, and then tries to understand *causally* why these psychological processes took the course they did by applying a scientifically based theory of general psychological functioning.
- (3) *Descriptive research at the level of the individual that makes use of quantification.* An example here is what Stern refers to as “psychography”, where an individual is characterized in terms of a number of attributes. This can be done either (a) by using psychometric measures developed in research on individual differences (e.g., self-assessment questionnaires of personality traits), or (b) by the use of measures developed ideographically for the specific individual in question, as suggested by Lamiell. This research may be either variable-focused (to the extent that it focuses on the variable as the analytic unit and does not analyze patterns of variables as undivided units) or pattern-focused (to the extent that it focuses on patterns of scores on variables as the analytical units). This research may also involve the calculation of *idiographic indices* on the basis of repeated assessments within the individual. Examples are an individual’s mean scores on a variable over time (measuring his/her typical experience over the sampling period), standard deviation (e.g., quantifying the degree of variability in a person’s moods), within-person correlations (reflecting the co-variation between two variables for a given individual over time), and time-based slope (reflecting change in a variable over time).
- (4) *The search for lawful regularities at the level of the individual.* An example here is Allport’s “morphogenetic” research on patterns within the individual, in the form of “personal dispositions”, or “major foci in the life of a person”. Another example is Magnusson’s approach, which focuses on identifying patterns of functioning and development within the individual person. This kind of idiographic research is, by definition, both individual-focused and pattern-focused.
- (5) *Repeated studies of individual persons in order to arrive at nomothetic knowledge about people in general.* Lamiell coined the term “idiothetic” to refer to such a series of idiographic studies at the level of the individ-

ual, for the purpose of developing nomothetic knowledge about principles of personality functioning that hold for people in general.

- (6) *Classification of persons' patterns*, in terms of similarities in functioning and development. Stern called this "comparison research", and this is an important part of Magnusson's holistic-interactionistic approach. The patterns classified need not be *intrapersonal* but may as well refer to *interpersonal* sequences of events. Methods that can be used include cluster analysis, configural frequency analysis, latent profile analysis, and latent class analysis.

To summarize, there are many varieties of idiographic or person-oriented research, which differ in several respects, as for example (1) the type of knowledge that is aimed for, (2) how they connect the individual level with the population level, and (3) whether they use variables or patterns as the analytic unit. This also suggests that the traditional contrast between person-oriented and variable-oriented research should be dissolved into two contrasts: (a) *individual-focused* versus *population-focused* research, and (b) *variable-focused* versus *pattern-focused* research. Although all kinds of idiographic research within psychology may be seen as person-oriented, a *fully* person-oriented research involves a focus both on the individual person and on patterns within the individual person (Bergman & Andersson, 2010). The reason for the latter conclusion is that idiographic research which focuses on single variables and associations between these does not take account of the nature of the person as a holistic psychophysical system.

One limitation of the present paper is that the discussion has been restricted primarily to the writings of Windelband, Stern, Allport, Lamiell and Magnusson. Obviously, there are many others who have also set the person firmly in the focus for their research efforts, and/or have contributed to the development of some form of idiographic research. This is perhaps most obvious within clinical psychology. One example is Carl Rogers' (1951) *person-centered approach* to personality development and psychotherapy. Another example is B. F. Skinner (1969), who rejected the concept of personality, and whose research cannot be considered as fully person-oriented, but who nevertheless advocated a form of idiographic research in the form of *behavior analysis*, which is a tradition that is very much alive. Finally, the psychoanalytic tradition harbors a wide variety of theoretical conceptualizations which are potentially relevant to the understanding of the person, although there is little in the form of research related to these theories.

There are also a large number of more recent writers within developmental research, personality psychology and clinical psychology who have contributed to this growing research area, but have not been mentioned here (although several of them are authors of other articles in this special

issue). For example, important contributions have been made by Peter Molenaar, who has called for a new person-oriented paradigm in psychological research, as seen in scientific papers with titles like "A manifesto on psychology as idiographic science: Bringing the person back into scientific psychology, this time forever" (Molenaar, 2004) and "The new person-specific paradigm in psychology" (Molenaar & Campbell, 2009), and who has contributed to the development of advanced methods for time-series analysis. According to Molenaar and Campbell (2009, p. 116), "We are at the brink of a major reorientation in psychological methodology, in which the focus is on the variation characterizing time-dependent psychological processes occurring in the individual human subject." Also, for a partly different perspective on issues brought up in this article, see Valsiner (1986).

Finally, it should not be forgotten that there also exist a number of qualitative methodological approaches that can be used for the study of the individual, which have not been included in this overview. In principle, however, a similar discussion could be carried out also with regard to these kinds of methods. Common to many of these approaches, verbal data obtained with semi-structured interviews from a small number of participants are analyzed in terms of recurrent *themes* – as for example in thematic analysis (Braun & Clarke, 2006) and interpretative phenomenological analysis (Smith & Osborn, 2003). These data may, in principle, be analyzed either in terms of *themes across persons* or in terms of *patterns of themes within persons*. The former seems to be much more common than the latter, which means that this research is more "theme-oriented" than "person-oriented". On the other hand, there are also examples when these kinds of data are analyzed in the form of a case studies, which are clearly person-oriented. A detailed discussion of these methodologies, however, lies beyond the intentions of the present paper.

Acknowledgements

I want to thank Lars R. Bergman, Artur Nilsson and Margit Wångby-Lundh for valuable comments on earlier versions of the present paper.

References

- Allport, G.W. (1937). *Personality: A psychological interpretation*. New York: Holt, Rinehart & Winston.
- Allport, G. W. (1961). *Pattern and growth in personality*. New York: Holt, Rinehart & Winston.
- Allport, G.D. (1962). The general and the unique in psychological science. *Journal of Personality*, 30, 405–422.
- Allport, G. W. (1965). *Letters from Jenny*. New York: Harcourt, Brace & World, 1965.
- Allport, G. W. (1966). Traits revisited. *American Psychologist*, 21, 1-10.

- Allport, G. W. (1967). In: E. G. Boring & G. Lindzey, (Eds.). A history of psychology in autobiography, Vol V. East Norwalk, CT, US: Appleton-Century-Crofts, pp.1-25.
- Asendorpf, J. B. (2015) Person-oriented approaches within a multi-level perspective. *Journal for Person-Oriented Research*, 1, 48-55. doi: 10.17505/jpor.2015.06
- Aunola, K., Tolvanen, A., Kiuru, N., Kaila, S., Mullola, S., & Nurmi, J.-E. (2015). A person-oriented approach to diary data: Children's temperamental negative emotionality increases susceptibility to emotion transmission in father-child dyads. *Journal for Person-Oriented Research*, 1, 72-86. doi: 10.17505/jpor.2015.08
- Barlow, D. H., & Nock, M. K. (2009). Why can't we be more idiographic in our research? *Perspectives on Psychological Science*, 4, 19-21. doi: 10.1111/j.1745-6924.2009.01088.x
- Bennett, M. R., & Hacker, P. M. S. (2003). *Philosophical foundations of neuroscience*. Oxford, England: Blackwell.
- Bergman, L. R., & Andersson, H. (2010). The person and the variable in developmental psychology. *Journal of Psychology*, 218, 155-165. doi: 10.1027/0044-3409/a000025
- Bergman, L. R., & Magnusson, D. (1997). A person-oriented approach in research on developmental psychopathology. *Development and Psychopathology*, 9, 291-319. doi: 10.1017/S095457949700206X
- Bolger, N., Davis, A., & Rafaeli, E. (2003). Diary methods: Capturing life as it is lived. *Annual Review of Psychology*, 54, 579-616. doi: 10.1146/annurev.psych.54.101601.145030
- Boswell, J. F., Anderson, L. M., & Barlow, D. H. (2014). An idiographic analysis of change processes in the unified transdiagnostic treatment of depression. *Journal of Consulting and Clinical Psychology*, 82, 1060-1071. doi: 10.1037/a0037403
- Braun, V. and Clarke, V. (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77-101. doi: 10.1191/1478088706qp063oa
- Cattell, R.B. (1952). The three basic factor-analytic designs: Their interrelations and derivatives. *Psychological Bulletin*, 49, 499-520.
- Conner, T. S., Tennen, H., Fleeson, W., Feldman Barrett, L. (2009). Experience sampling methods: A modern idiographic approach to personality research. *Social and Personality Psychology Compass*, 3, 292-313. doi:10.1111/j.1751-9004.2009.00170.x.
- Elliott, R. (2002). Hermeneutic single case efficacy design. *Psychotherapy Research*, 12, 1-20. doi: 10.1093/ptr/12.1.1
- Eysenck, H. J. (1952). *The scientific study of personality*. New York: Macmillan.
- Fahrenberg, J., Myrtek, M., Pawlik, K., & Perrez, M. (2007). Ambulatory assessment – Monitoring behavior in daily life settings. A behavioral-scientific challenge for psychology. *European Journal of Psychological Assessment*, 23, 206-213. doi: 10.1027/1015-5759.23.4.206
- Gazzaniga, M. (1998). *The mind's past*. Berkeley, CA: University of California Press.
- Kazdin, A.E. (2011). *Single-case research designs: Methods for clinical and applied settings. Second edition*. New York: Oxford University Press.
- Lamiell, J.T. (1981). Toward an idiographic psychology of personality. *American Psychologist*, 36, 276-289.
- Lamiell, J.T. (1986). What is nomothetic about 'nomothetic' personality research? *Journal of Theoretical and Philosophical Psychology*, 6, 97-107.
- Lamiell, J.T. (1991). Explanation in a reconceived psychology of personality. *Journal of Theoretical and Philosophical Psychology*, 11, 11-23.
- Lamiell, J.T. (1998). "Nomothetic" and "idiographic". Contrasting Windelband's understanding with present usage. *Theory & Psychology*, 8, 23-38.
- Lamiell, J. T. (2007). On sustaining critical discourse with mainstream personality investigators: Problems and prospects. *Theory & Psychology*, 17, 169-185. doi: 10.1177/0959354307075041
- Lamiell, J. T. (2003). *Beyond individual and group differences: Human individuality, scientific psychology, and William Stern's critical personalism*. Thousand Oaks, CA: Sage.
- Lamiell, J. T. (2010a). *William Stern (1871-1938): A Brief Introduction to His Life and Works*. Lengerich, Germany: Pabst Science Publishers.
- Lamiell, J. T. (2010b). Why was there no place for personalistic thinking in 20th century psychology? *New Ideas in Psychology*, 28, 135-142. doi:10.1016/j.newideapsych.2009.02.002
- Lamiell, J. T. (2012). Introducing William Stern (1871-1938). *History of Psychology*, 15, 379-384. doi: 10.1037/a0027439
- Lamiell, J. T. (2013). On psychology's struggle for existence: Some reflections on Wundt's 1913 essay a century on. *Journal of Theoretical and Philosophical Psychology*, 33, 205-215. doi: 10.1037/a0033460
- Lamiell, J. T. (2014). Toward a critically personalistic general psychology in consideration of its unifying potential. *Review of General Psychology*, 18, 1-6. doi: 10.1037/a0036146
- Magnusson, D. (1992). Back to the phenomena: Theory, methods and statistics in psychological research. *European Journal of Personality*, 6, 1-14.
- Magnusson, D. (1999). Holistic interactionism: A perspective for research on personality development. In L. Pervin & O. John (Eds.), *Handbook of personality* (pp. 219-247). New York: Guilford
- Magnusson, D. (2000). Individual development: Toward a developmental science. *Proceedings of the American Philosophical Society*, 143, 86-96.
- Magnusson, D. (2001). The holistic-interactionistic paradigm: Some directions for empirical developmental research. *European Psychologist*, 6, 153-162. doi: 10.1027//1016-9040.6.3.153
- Magnusson, D. (2012). The human being in society: Psychology as a scientific discipline. *European Psychologist*, 17, 21-27. doi: 10.1027/1016-9040/a000079
- McLeod, J. (2013). Increasing the rigor of case study evidence in therapy research. *Pragmatic Case Studies in Psychotherapy*, 9, 382-402.
- Molenaar, P. C. M. (2004). A manifesto on psychology as idiographic science: Bringing the person back into scientific psychology, this time forever. *Measurement: Interdisciplinary Research and Perspectives*, 2, 201-218. doi: 10.1207/s15366359mea0204_1
- Molenaar, P. C. M. (2015). On the relation between per-

- son-oriented and subject-specific approaches. *Journal for Person-Oriented Research*, 1, 34-41. doi: 10.17505/jpor.2015.04
- Molenaar, P. C. M., & Campbell, C. G. (2009). The new person-specific paradigm in psychology. *Current Directions in Psychological Science*, 18, 112-117. doi: 10.1111/j.1467-8721.2009.01619.x
- Nicholson, I. A. M. (2003). *Inventing Personality. Gordon Allport and the Science of Selfhood*. Washington, DC: American Psychological Association.
- Rogers, Carl (1951). *Client-Centered Therapy*. Cambridge Massachusetts: The Riverside Press.
- Rorer, L.G., & Widiger, T.A. (1983). Personality structure and assessment. *Annual Review of Psychology* (Vol. 34, pp. 431-463). Palo Alto, CA: Annual Reviews Inc.
- Skinner, B. F. (1969). *Contingencies of reinforcement*. New York: Appleton-Century-Crofts.
- Smith, J. A., & Osborn, M. (2003). Interpretative phenomenological analysis. In J. A. Smith (Ed.), *Qualitative Psychology: A Practical Guide to Methods*. London: Sage.
- Stern, W. (1906). *Person und Sache: System der philosophischen Weltanschauung. Erster Band: Ableitung und Grundlehre*. Leipzig: Barth.
- Stern, W. (1911). *Die Differentielle Psychologie in ihren methodischen Grundlagen*. Leipzig: Barth.
- Stern, L. W. (1938). *General psychology: From the personalistic standpoint*. New York: MacMillan.
- Stiles, W. B. (2007). Theory-building case studies of counselling and psychotherapy. *Counselling and Psychotherapy Research*, 7, 122-127. doi: 10.1080/14733140701356742
- Stone, A.A., & Shiffman, S. (2008). Ecological momentary assessment. *Annual Review of Clinical Psychology*, 4, 1-32. doi: 10.1146/annurev.clinpsy.3.022806.091415
- Tennen, H., Affleck, G., Armeli, S., Carney, D. (2000). A daily process approach to coping: Linking theory, practice, and research. *American Psychologist*, 55, 626-636. doi: 10.1037/0003-066X.55.6.626
- Valsiner, J. (1986). *The individual subject and scientific psychology: Perspectives on individual differences*. Kluwer Academic/Plenum Press.
- Valsiner, J. (2015). From person-oriented to person-centered psychology: Abstracting structures of relationships. *Journal for Person-Oriented Research*, 1, 7-14. doi: 10.17505/jpor.2015.02
- Windelband, W. (1894/1998). History and natural science. Translated and with an introduction by James Lamiell. *Theory and Psychology*, 8, 5-22.