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SPIS TREŚCI

Contemporary views on personal identity formation

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ABSTRACT

Identity development is undoubtedly one of the most crucial tasks in human life. Identity is also one of the most frequently examined issues in contemporary developmental psychology research. In the literature, we can find various definitions of identity, as well as various theoretical conceptualizations and models.

The present paper describes contemporary models of personal identity, provides the definitions of the notions (as processes/dimensions/styles/modes) included in these models, measurement methods, as well as a review of the research results obtained in these various theoretical paradigms. The review includes multiple approaches – from Marcia's classical identity status paradigm, through neo-Eriksonian models (such as the three and five dimensional models, identity styles, identity processes in adulthood) up to narrative views. Finally, we present conclusions based on the analyses of these models and implications for future research and theory.

KEYWORDS

IDENTITY
IDENTITY STATUSES
IDENTITY STYLES
IDENTITY DIMENSIONS
IDENTITY PROCESSES
IDENTITY MODES
EXPLORATION
COMMITMENT

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IDENTITY IN PSYCHOLOGY – DEFINITION AND HISTORICAL VIEW

VARIOUS DEFINITIONS OF IDENTITY

Identity research is a rapidly growing area of psychological literature. The term *identity* is indexed 33,687 times in the EBSCO database, based on the titles of the papers (as of 2018). It is almost half as popular as personality, which is probably one of the most frequently used terms in psychology (more than 71,000 articles included this word in their titles). Despite the fact that it is one of the most popular terms in psychological research, there is probably not a single and widely accepted definition of identity.

Historically and philosophically, the term *identity* derives from a notion of *identical* and was considered as "being the same, or alike, in all respects (identical)" (Drever, 1947, p. 128) and even more contemporary sources define identity theories as: "an approach to the mind-body problem, a form of materialism holding that mental states have no separate existence but are identical to physical brain states" (Coleman, 2003, p. 353). In their dictionary of psychology, Reber, Allen, and Reber (2009) define identity, when treated as a notion from personality theories, as a subjective perceiving oneself as unique, the essence of a person, linked with the continuous self. In the *APA Dictionary of Psychology* (VandenBos, 2007), we can find similar definition:

> an individual sense of self defined by (a) physical, psychological, and interpersonal characteristics that is not wholly shared with any other person and (b) a range of affiliations (e.g. ethnicity) and social roles. Identity involves a sense of continuity, or the feeling that one is the same person today that one was yesterday or last year (despite physical or other changes). Such a sense is derived from one's body sensations; one's body image; and the feeling that one's memories, goals, values, expectations, and beliefs belong to the self (p. 519).

The current paper reviews the most prevalent *personal identity* theories and research. Personal identity (also called *individual identity*) can be described as a self-definition, made, developed or created by an individual (Vignoles, Schwartz, & Luyckx, 2011). This definition may be composed of various factors: aims, desires, goals, values, ideology, beliefs, etc. In line with the dual distinction in identity research, personal identity theories are mainly focused on these factors (also called the content of identity) and the *processes* individuals use to develop their identity, in order to make the distinction between identity content and identity processes.

Identity is also a concept in everyday language. Non-psychological sources, such as the Collins Dictionary (2016) define identity as answer to the question "Who am I?" and the characteristics that distinguish one person from others. This definition can be treated as most adequate for contemporary personal identity theories that will be described in this paper. This definition is also consistent with Matsumoto's psychological dictionary (2009), where identity is explained as "the way individuals understand themselves and are recognized by others" (Matsumoto, p. 244). This dictionary also defines personal identity as the beliefs about characteristics that distinguish individuals from other people. Alongside personal identity, Matsumoto also lists for example collective, rational, and gender identities. Identity formation is, in turn, defined as the process of forming "a stable sense of self" (p. 246), including commitment to various life roles and beliefs about human life.

One of the first comprehensive identity handbooks (Schwartz, Luyckx, & Vignoles, 2011) also defines identity as the answer to the question "Who am I?". This answer may

refer to such aspects as a sense of belonging to a given group, roles played in society, relations with other people, self-definitions, etc. Schwartz et al. (2011) distinguish *individual* or *personal identity* (linked with self-definitions), *relational identity* (connected with roles towards other people), and *collective identity* (group identification). The present review focuses on contemporary views of *personal identity*.

According to Vignoles et al. (2001), a few important questions should be raised when researching identity: Is it stable or fluid? Is it individual or collective? Is it discovered by the individual during development or is it constructed? And finally, should it be examined using qualitative or quantitative methods? Moreover, during research design another set of questions could be asked: What developmental stage will be studied? What domains of identity formation will studies focus on? How will detailed identity formation processes be examined? How many variables will be needed? Various identity formation models provide different answers to these questions. The choice of model for conducting research depends on the research question and the sample. Below, we present identity formation models and measurement tools designed to assess the variables distinguished in these models, as well as the most important research findings based on these models. We chose to focus on identity models that are often cited and verified in the contemporary literature on identity development.

PERSONAL IDENTITY THEORIES – THE BACKGROUND

One theory important for understanding further identity views and concepts is Havighurst's (1948) developmental tasks theory. Havighurst defined developmental tasks as the tasks appearing in certain life stages. Achieving these tasks contributes to individuals' happiness and success, whereas not overcoming them is a factor for disappointment and failure in later tasks and later life.

Havighurst distinguished six life stages: infancy and early childhood, middle childhood, adolescence, early adulthood, middle age, and later maturity. Each life stage has specific requirements and tasks. Adolescence is the key stage for identity development according to Havighurst. During adolescence, individuals have to build mature peer relationships, shape their gender role, accept their own appearance, achieve independence from their parents and other adults, prepare for starting a family and occupational career, and develop their own ideology. These tasks are inseparably connected to identity formation.

A later theory that is also highly important for the contemporary understanding of identity formation and is also related to developmental stages and life tasks an individual has to deal with is Erikson's (1950, 1968, 1980) psychosocial theory of human development. According to Erikson, human development is a sequence of life crises, specific to each life stage. One crisis has to be overcome to achieve further satisfactory development. Among eight life dilemmas (Trust versus Mistrust, Autonomy versus Shame, Initiative versus Guilt, Industry versus Inferiority, Identity versus Role Confusion, Intimacy versus Isolation, Generativity versus Stagnation, Ego Integrity versus Despair) the fifth, Identity versus Role Confusion, takes place in adolescence. Erikson considered adolescence to be crucial for developing ego identity and identity crisis is defined as the period of exploring various life roles.

Adolescence is a time for integrating and shaping ego identity. Young people are in the stage that Erikson (1950) called *moratorium* – the phase between adolescence and adulthood, between the things that a young person has learned as a child (that are no longer satisfactory) and the things that he or she can learn in adult life. According to Erikson, identity formation neither starts, nor ends in adolescence. However, adolescence is crucial for this task, as this is the time when the question "Who am I?" arises. The answer to this question can help individuals manage various life requirements, despite life and individual changes.

ERIKSON'S PSYCHOSOCIAL THEORY OF HUMAN DEVELOPMENT:

Eight life crises individual has to overcome
Identity – fifth crisis

The sense of identity can be loose and be further shaped in adulthood, however it should be first developed in adolescence. Nowadays, much research also considers *Emerging Adulthood* (Arnett, 2000), which spans from the late teens through the twenties, and is also considered an important period for solving identity issues. This period (the question whether it should be treated as a separate developmental stage is still open) is characterized by feeling in-between adolescence and adulthood, and is related to postponing adult commitments.

Erikson's view of identity was operationalized and further developed by Marcia (1966), who defined identity as a kind of *self-structure*, composed of human beliefs, ideology, goals, and values. Marcia proposed the identity status paradigm, wherein identity structure is based on two pivotal categories: *exploration* (firstly called crisis) and *commitment*. On the one hand, exploration is understood as actively seeking alternatives available in the individual's current environment and recognizing the relationships and individual resources present in this environment. Commitment, on the other hand, is a decision or choice made in an identity relevant area. This is the choice of the life path an individual wants to follow and it requires assuming responsibility for this decision.

Marcia expanded Erikson's dilemma Identity versus Identity Confusion to four possibilities: *identity achievement*, *identity diffusion*, *identity moratorium*, and *identity foreclosure*. These possibilities were called identity statuses and are based on the presence or absence of the two categories: commitment and exploration. The identity statuses proposed by Marcia are presented and described in Table 1.

Table 1. Marcia's identity status paradigm – the descriptions of the four statuses

Status	Commitment and exploration occurance		Description
Achievement	Commitment	YES	In the achievement status, there is a commitment to an important life choice, after experiencing the crisis of exploration. The choice is consistent with personal needs, values, and feelings. The achieved identity is stable and resistant to changes in the environment and new responsibilities. In achievement, the individual knows who she or he wants to be and what life path to take, is aware of his/her own capacities, restrictions, environmental requirements, etc.
	Exploration	YES	
Foreclosure	Commitment	YES	In the foreclosure status, the individual does not explore, however, she or he appears to be committed to current identity decisions. Sometimes this is the result of internalizing the expectations of significant others. Identity foreclosure is connected to conformism.
	Exploration	NO	
Diffusion	Commitment	NO	The diffusion status is characterized by the lack of commitment. Even when there are some commitments, they are loose or easily changed by the individual. Identity diffusion is linked to anxiety or a fear of entering relationships, which can result in difficulties in school or in daily life.
	Exploration	NO	
Moratorium	Commitment	NO	In the moratorium status, commitment is unclear and various possibilities are intensively explored. It is a time of frequent changes, of seeking new activities, which can sometimes be inconsistent. Social support is very important in this status.
	Exploration	YES	

Research has shown that identity statuses are different in terms of personality (for a review see Kroger & Marcia, 2011): achievement was reported to be related to high extroversion, emotional stability, conscientiousness, openness to experience, and low levels of psychosocial problems. Foreclosure was characterized by low openness to experience and a low level of psychosocial problems. Moratorium was linked to high openness to experience, low emotional stability, low conscientiousness, and a high level of psychosocial problems. Finally, individuals in the diffusion status were characterized by a less adaptive personality profile: low emotional stability, conscientiousness, openness to experiences, and high levels of psychosocial problems.

Identity statuses can be measured in various ways. The initial identity measures were structured or semi-structured interviews. The Ego Identity Incomplete Sentences Blank (EI-ISB; see Kroger & Marcia, 2011), was the original tool designed to identify achieved identity. The second method was the Identity Status Interview (ISI; Marcia, 1966), designed to capture the presence of the two identity processes: commitment and exploration. Finally, probably the most frequently used self-report questionnaire designed for measuring statuses is the Extended Objective Measure of Ego Identity Status II (EOM-EIS-II; Marcia, 1993) that has been validated in various languages version such as English, Spanish, or Swedish (see Schwartz et al., 2006). Erikson's psychosocial theory is the foundation of contemporary approaches to identity. It emphasizes the importance of adolescence for overcoming identity crisis by answering the question "Who am I?", but also it highlights that this question may appear again at various life stages. This approach, along with Marcia's identity operationalization, initiated the contemporary trend of research on identity.

CONTEMPORARY NEO-ERIKSONIAN VIEWS OF IDENTITY FORMATION

Erikson and his psychosocial theory introduced the notion of identity to psychological research. On the basis of his work, the following models were proposed: Marcia's (1966) status paradigm, which was further extended into process-oriented models (see Bosma & Kunnen, 2001; Crocetti, Rubini, & Meeus, 2008; Grotevant et al., 1987; Luyckx et al., 2008; Whitbourne, Sneed, & Skultety, 2002), the social-cognitive model of identity styles (Berzonsky, 1989), the eudaimonic identity model (Waterman, 1982) and, finally, the integrative Circumplex of Identity Formation Modes model (Cieciuch & Topolewska, 2017; Topolewska & Cieciuch, 2017). McAdams (1985, 1993) also provides another perspective on Erikson's identity theory with the model of personality within the narrative identity paradigm. All models are discussed in the following sections.

PROCESS-ORIENTED MODELS

The process-oriented models are mainly focused on the processes individuals use to develop their identity, rather than on categorizing people into various statuses. One of the first steps to elaborate on Marcia's theory was made by Bosma (1985, 1986) who differentiated between *commitment making* and *identification with commitment* as the fact that individual has made a commitment in an identity relevant domain does not necessarily means that he or she identifies with this commitment. Grotevant (1987) was one of the first who published process-oriented identity view and highlighted that identity is being developed in various life domains. Then, the model proposed by Stephen, Fraser, and Marcia (1992) described the cycles of *moratorium-achievement* (MAMA) and showed that in identity formation there is a continuous cycle of commitment and exploration, occurring one after another. Later, another important differentiation was made: Meeus and colleagues (2002) highlighted the role of exploration in maintaining an individual's commitments and suggested that the exploration process plays a role in managing current commitments. Meanwhile, Meeus (1996) proposed the reinterpretation of exploration and commitment as *dimensions* with the possibility of low or high levels instead of occurrence or lack thereof, as Marcia did.

Based on these findings, the two most frequently examined process-oriented models were developed. One includes three and the other includes five identity processes, instead of the two proposed by Marcia. The first of these two well-examined process-oriented models

derived from Marcia's theory was proposed by Luyckx and colleagues (Luyckx, Goossens, & Soenens, 2006; Luyckx, Goossens, Soenens et al., 2006), and the second by Crocetti and colleagues (Crocetti, Rubini, & Meeus, 2008; Crocetti, Rubini, Luyckx, et al., 2008). Both models are described below.

Luyckx et al.'s Five-Dimensional Model. The five-process model proposed by Luyckx and colleagues (Luyckx, Goossens, & Soenens, 2006; Luyckx, Goossens, Soenens et al., 2006; Luyckx et al., 2008) includes two identity cycles: identity formation and identity evaluation. The identity formation cycle includes commitment making and exploration in depth. Commitment making is an identity decision. Moreover, one can identify with the commitment or not (identification with commitment). In-depth exploration is gathering information about an existing commitment, while exploration in breadth is gathering information about other possibilities. Identity evaluation (maintenance) includes the interplay between identification with commitment making and in-depth exploration. The cycles are visualised in the Figure 1. Initially, the model included four identity processes (Luyckx et al., 2005) and the fifth identity process, ruminative exploration, was proposed later (Luyckx, Goossens, & Soenens, 2006; Luyckx, Goossens, Soenens et al., 2006; Luyckx et al., 2008). Ruminative exploration, which is not included in the cycles, is a maladaptive form of exploration, related to ruminative thinking. The processes are described in Table 2.

Table 2. Identity processes in Luyckx et al.'s model

Construct	Description	Correlates/Research results
Commitment making	A decision made in an identity important domain	• Adjustment (Mannerström et al., 2016) • Low neuroticism (Luyckx et al., 2006) • Parenting (Soenens, Luyckx, Vansteenkiste, & Goossens, 2008) • High personal standards perfectionism, low maladaptive perfectionism (Luyckx, Soenens, Goossens et al., 2008)
Identification with Commitment	The extent to which one identifies with the decision made in an identity important domain, feeling certain about existing commitments	• Positive adjustment and good relationships with other people (Luyckx, Goossens, & Soenens, 2006; Mannerström et al., 2016) • High personal standards perfectionism, low maladaptive perfectionism (Luyckx, Soenens, Goossens et al., 2008)
Exploration in Depth	Gathering information about existing commitments, exploring current choices	• Adjustment, high extroversion (Luyckx, Goossens, Soenens et al., 2006) • Self-reflection (Luyckx et al., 2008) • Anxiety (Luyckx et al., 2008)
Exploration in Breadth	Gathering information about possible commitments, alternatives to choices that have already been made, weighing various commitment options	• Low adjustment (Luyckx, Goossens, Soenens et al., 2006) • Self-reflection (Luyckx et al., 2008) • Neuroticism and extroversion (Luyckx, Goossens, Soenens et al., 2006) • Depressive symptoms and low self-esteem (Schwartz et al., 2009)
Ruminative Exploration	A type of exploration linked with problems with making decision, ruminative thinking, and worrying	• Distress, depression, ruminative thinking, low well-being, low self-esteem (Luyckx et al., 2008) • Maladaptive perfectionism (Luyckx, Soenens, Goossens et al., 2008)

Based on these processes, five identity statuses can be empirically derived (Luyckx et al., 2005): *achievement, moratorium, foreclosure, troubled diffusion*, and *carefree diffusion*. The first three statuses are similar to those proposed by Marcia. The main differences are in the diffusion status, namely carefree diffusion which is characterized by low levels of exploration

processes and low to moderate commitment processes. The Dimensions of Identity Development Scale (DIDS; Luyckx et al., 2008) is designed to measure the five identity processes. The tool is 25-item self-report questionnaire, measuring identity processes related to an individual's plans for the future. The DIDS questionnaire has been validated in a variety of different countries, such as Greece, Turkey, and Japan (see Mastrotheodoros & Motti, 2016; Morsunbul & Cok, 2014; Nakama et al., 2015).

Crocetti et al.'s Three-Factor Identity Model. This model includes three pivotal identity processes: *commitment, in-depth exploration,* and *reconsideration of commitment* and it is focused on the extent to which an individual explores and commits to identity relevant choices, as opposed to solely focusing on the presence or absence of these processes. The definitions of these processes and their correlates are presented in Table 3. According to this model, there are two cycles in the process of identity development: *identity formation* (including reconsideration of commitment and commitment) and *identity maintenance,* including commitment and in-depth exploration (Crocetti, 2017). The similarities and differences between two dual-cycle models are presented in Figure 1.

Table 3. Identity processes in Crocetti et al.'s model

Construct	Description	Correlates/Research results
Commitment	The decisions made by individuals in identity important life domains, and the extent to which one identifies with these decisions	• Extraversion, emotional stability, high self-esteem (Crocetti, Rubini, Luyckx et al., 2008) • Well-being (Karaś et al., 2015) • Positive relationships with others (Crocetti et al., 2017) • Adjustment (2013; Crocetti et al., 2009)
In-depth Exploration	Actively seeking information about existing commitments, talking with other people about existing commitments, etc.	• Openness to experience, agreeableness, conscientiousness (Crocetti et al., 2010) • Well-being and satisfaction with life (Karaś et al., 2015; Sugimura et al., 2015) • Positive relationships with others (Crocetti et al., 2017) • Low emotional stability and high problematic behaviors (Crocetti, Rubini, Luyckx et al., 2008)
Reconsideration of Commitment	A comparison between current commitments and other possibilities, as well as an individual's efforts to change existing commitments, when they are no longer satisfactory	• Low extraversion and agreeableness (Crocetti, Rubini, Luyckx et al., 2008) • Low well-being (Karaś et al., 2015) • Problems with relationships (Crocetti et al., 2017) • Problematic behaviors (Crocetti et al., 2013)

CROCETTI ET AL.:

Three identity processes and two cycles (identity formation, identity maintenance)

Based on these three processes, Crocetti, Rubini, Luyckx et al. (2008) empirically derived five identity statuses: *achievement, early closure, moratorium, searching moratorium,* and *diffusion.* Achievement is characterized by high commitment, in-depth exploration, and low reconsideration of commitment. Early closure is characterized by a moderate-to-high level of commitment and low levels of exploration and reconsideration of commitment. The main difference in the statuses between this theory and Marcia's view are the two types of moratorium: one more adaptive and the other less adaptive. People in moratorium are characterized by a low level of commitment and a low to moderate level of reconsideration of commitment. People in the searching moratorium status have high levels of all three identity processes. Finally, diffusion is characterized by low levels of all three processes.
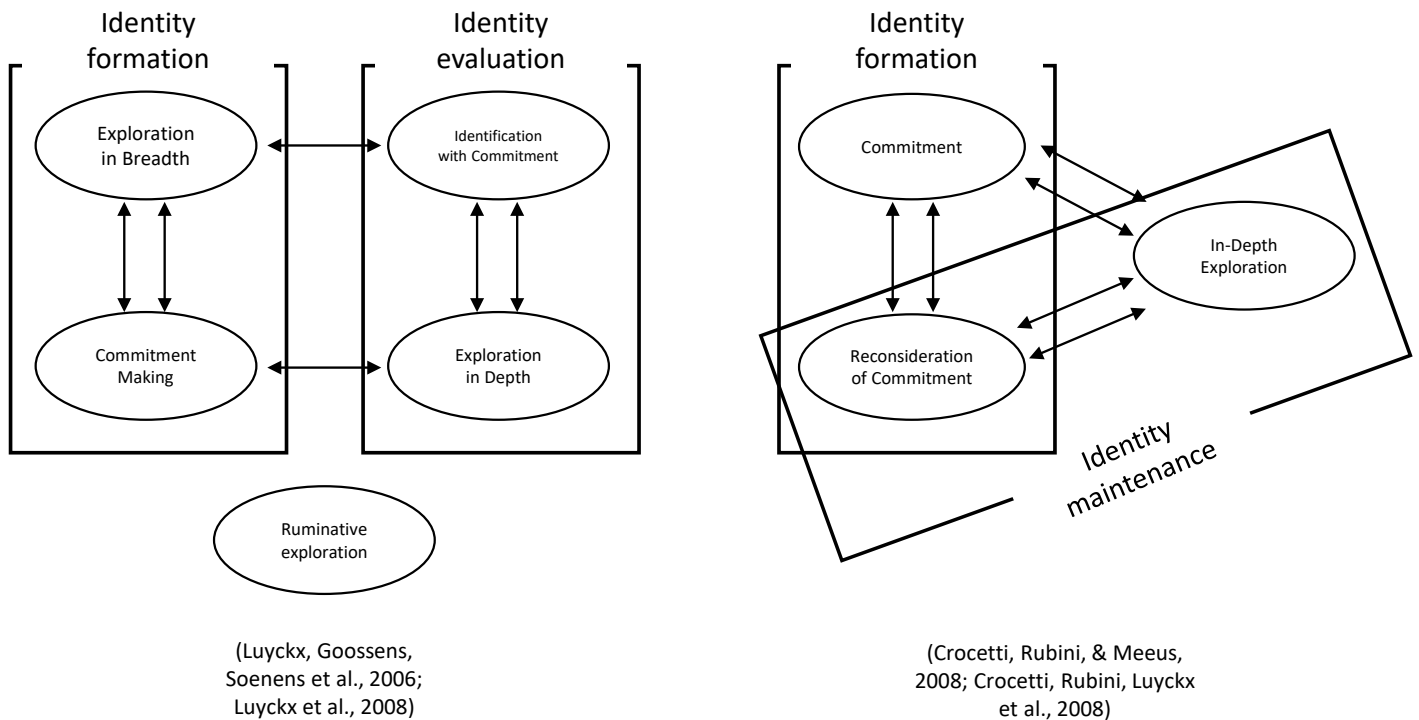
Figure 1. Two cycles of identity in two conceptualizations.

The first tool developed to measure the identity processes conceptualized in this theory was the Utrecht-Groningen Identity Development Scale (U-GIDS; Meeus, 1996), including commitment and in-depth exploration. When the theory was complemented by reconsideration of commitment, a new 13-item tool based on the U-GIDS, was developed: the Utrecht Management of Identity Commitment Scale (U-MICS; Crocetti, Rubini, Luyckx et al., 2008). Both questionnaires are self-report tools and enable measuring identity processes in various domains. The U-MICS questionnaire was validated in various countries and cultures, such as: Bulgaria, Czech Republic, China, Greece, Italy, Japan, Kosovo, the Netherlands, Poland, Portugal, Romania, Slovenia, Switzerland, Taiwan, and Turkey (see Crocetti et al., 2015; Dimitrova et al., 2015; Llorent & Alamo, 2018). Inspired by the three-factor model and U-MICS questionnaire, Karaś and Cieciuch (2015) modified the original U-MICS scale by adding bi-directional scoring to the commitment subscale and including eight identity domains previously identified in qualitative studies to be the most important for identity in emerging adulthood – the number of items per domain was unchanged. The proposed tool is called the Warsaw Management of Identity Commitment Scale (W-MICS).

The two process-oriented identity models described above are schematically presented in Figure 2. The main difference between these models is the operationalization of the identity formation cycle (Crocetti, 2017). In the three-factor identity model, adolescents have some preliminary commitments. In the five-dimensional model (which is more similar to Marcia's view), identity formation starts without any preliminary commitments.

(Luyckx, Goossens,
Soenens et al., 2006;
Luyckx et al., 2008)

(Marcia, 1966)

(Crocetti, Rubini, & Meeus,
2008; Crocetti, Rubini, Luyckx
et al., 2008)
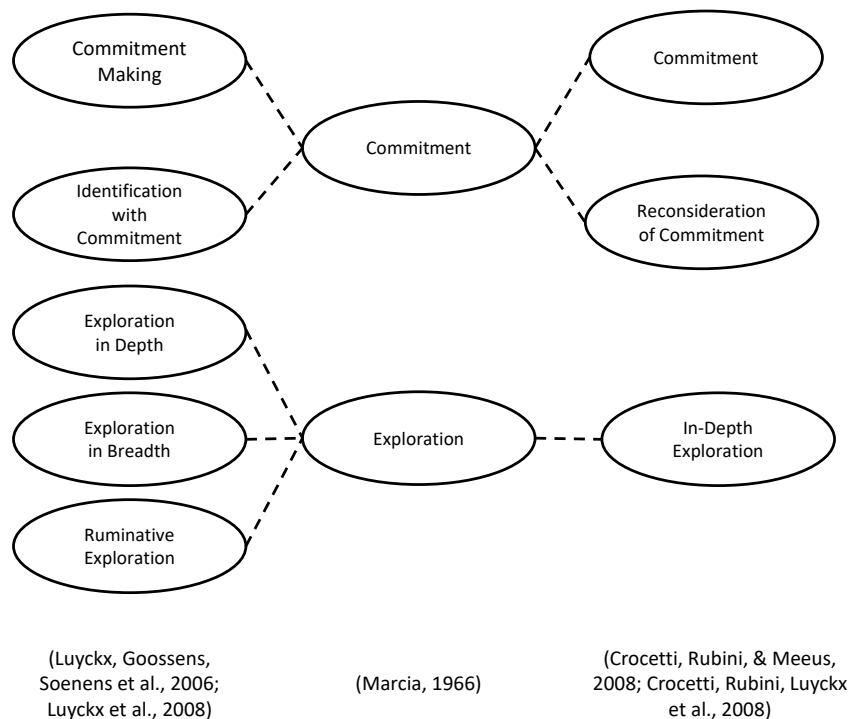
Figure 2. Identity processes in a Neo-Eriksonian perspective.

BERZONSKY'S SOCIAL-COGNITIVE PERSPECTIVE

Rather than treating identity as a dilemma of one life stage, Berzonsky (1989, 2003, 2004) proposed identity as an implicit self-theory (see Kelly, 1955), composed of personal constructs and self-representations that the individual creates. Berzonsky introduced a cognitive aspect into identity formation and even related it to Descartes' theory: who we are is determined by our cognitive processes – thinking and doubting. Unlike other identity theories, Berzonsky focuses on adulthood in addition to adolescence.

Berzonsky's model focuses on the social-cognitive strategies used by individuals in the process of identity development. According to Berzonsky, identity can be considered as both a structure and a process. People organize their personal constructs (the process) and synthesize them into cognitive theories (the structure). People are self-theorists and their theories include their behaviours and experiences, values and goals, ideologies, life requirements, and the whole history of their life. People differ in the manner that they approach or avoid identity tasks and these differences play an important role in solving problems and making decisions.

Berzonsky distinguished three styles used by individuals in the process of identity formation: *informative, normative,* and *diffuse-avoidant* styles. They are described in Table 4. These styles can be seen as similar to Marcia's statuses: informative to achieved identity or moratorium, normative to foreclosure, and diffuse-avoidant to identity diffusion.

BERZONSKY:

Three identity styles

Table 4. Identity styles in Berzonsky's theory

Construct	Description	Correlates/Research results
Normative Style	Adopting expectations, values, and aims from significant others. Protection of self-concept from discrepant information. Small tolerance for ambiguity of information, high need for cognitive closure, automatic approach to self-theory, stiffness, and resistance to changes	• Conscientiousness (Dollinger & Clancy Dollinger, 1997; Duriez & Soenens, 2006) • Low openness to experience (Dollinger & Clancy Dollinger, 1997; Duriez & Soenens, 2006) • High self-esteem (Luyckx et al., 2007) • Universalism (Berzonsky, Cieciuch, Duriez, & Soenens, 2011)
Informative Style	Active seeking, self-reflection, informative orientation, constantly learning new things about the self, sceptical thinking, openness to new information, criticism	• Openness to experiences, flexibility, well-being (Vleioras & Bosma, 2005) • Need for cognition (Berzonsky & Sullivan, 1992) • Success expectations and seeking social support (Nurmi, Berzonsky, & Tammi, 1997) • Conformity and tradition (Berzonsky et al., 2011)
Diffuse Avoidant Style	Procrastination and defensive avoidance of situations that require decision making. External locus of control, egocentrism, and present orientation	• Low well-being (Vleioras & Bosma, 2005) • Low conscientiousness (Dollinger & Clancy Dollinger, 1997; Duriez & Soenens, 2006) • Task-irrelevant behavior (Nurmi, Berzonsky, & Tammi, 1997) • Hedonism (Berzonsky et al., 2011)

Structural analyses of identity formation styles showed that the diffuse-avoidant style could be divided into two more detailed constructs: diffuse-carefree and avoidant styles (Cieciuch, 2010; Topolewska & Cieciuch, 2015). The former reflects identity formation without worrying about identity-relevant issues and purpose in life and is positively related to emotional stability. The latter is full of conformism and anxiety and contains a sense of being lost in the world and is negatively related to emotional stability and self-acceptance. These results are in line with the research described above that distinguished two types of diffuse statuses: diffused diffusion and carefree diffusion (Luyckx et al., 2008).

Identity processing styles can be measured by the Identity Style Inventory (ISI-5; Berzonsky et al., 2013), a 39-item self-report tool consisting of three scales, one for each of the informational, normative, and diffuse-avoidant styles. The items refer to life situations more generally rather than to any specific domain. During past decades the ISI has been validated in more than twenty countries throughout the world (see Berzonsky et al., 2013).

THE CIRCUMPLEX OF IDENTITY FORMATION MODES

Considering the diversity of identity formation models, Cieciuch and Topolewska (2017) proposed an integration of the models stemming from the Erikson-Marcia tradition within the *Circumplex of Identity Formation Modes* (CIFM). On the basis of a theoretical analysis of identity formation variables from the models described above, they distinguished eight circularly organized constructs: *Socialization, Consolidation, Exploration, Moratorivity, Defiance, Diffusion, Petrification*, and *Normativity*. The constructs considered in the theoretical development of the CIFM were: exploration and commitment along with four identity formation statuses by Marcia (1966); commitment, in-depth exploration, and reconsideration of commitment from Crocetti, Rubini, and Meeus (2008) model; identification with commitment, commitment making, exploration in depth, exploration in breadth, and ruminative exploration by Luyckx et al. (2008); informative, normative, and diffuse-avoidant
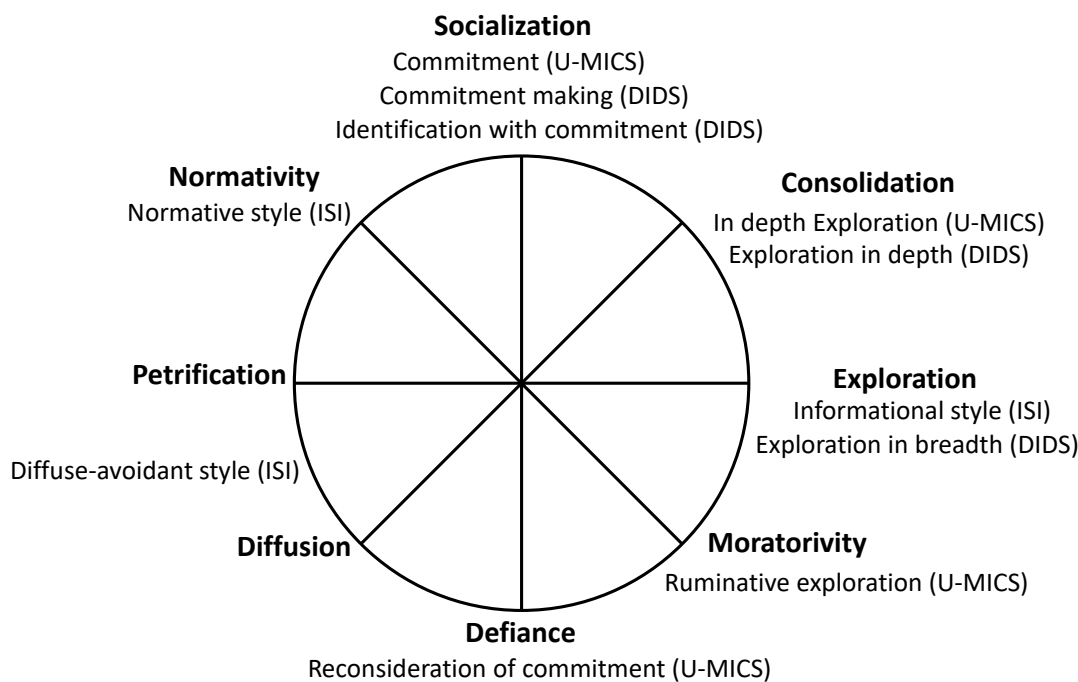
identity processing styles from Berzonsky's (1989) model. The descriptions of proposed constructs are presented in Table 5.

Table 5. Characteristics of the Identity Formation Modes (Topolewska & Cieciuch, 2017)

Mode	Description
Socialization	Defining oneself in such a way as to perform one's life roles well, according to the current stage in one's life. Beliefs concerning oneself form a coherent and stable system associated with a sense of being in the right place.
Consolidation	Using information derived from the exploration of different options for building a relatively stable identity structure. The individual does undertake long-term commitments but he/she is still open to other options and thus may modify them.
Exploration	Using information derived from the exploration of different options for building a relatively stable identity structure. The individual does undertake long-term commitments but he/she is still open to other options and thus may modify them.
Moratorivity	Actively seeking one's place in life by exploration, combined with commitments and engagements to ascertain whether they will be suitable for oneself in various respects. This quest is associated with a desire for a permanent commitment, which may give rise to tensions given the temporary nature of one's current commitments.
Defiance	The belief that one has not found one's place in life. Because this mode is located between Diffusion (identity indetermination) and Moratorivity (desire to undertake a commitment), it poses the risk that the adopted commitment will be in stark opposition to social norms.
Diffusion	A lack of a stable identity structure and being motivated in one's actions, beliefs, and decisions by situational variables and the environment rather than a cognitive identity structure.
Petrification	A lack of interest in thinking about oneself and developing an identity structure. The characteristic feature is fragmentation of a rather poorly developed cognitive identity structure, with the fragmented elements being rigid or even frozen.
Normativity	Forming the structure of identity based on the expectations of others. These expectations are not assessed, but rather uncritically adopted, which may be associated with certain cognitive rigidity and distortion.

In the CIFM, identity formation modes are used as the basic descriptor for different methods of identity formation. These modes are defined as a type of identity management; people can exhibit tendencies towards particular modes and switch between them while dealing with identity-relevant issues. The CIFM attempts to integrate the identity formation variables from different theoretical perspectives. The foundation for the circumplex model lays on the two basic dimensions, similar to those proposed by Marcia: exploration and commitment. Figure 3 presents the theoretically assumed and empirically confirmed relations between modes and others identity formation constructs.

Socialization
Commitment (U-MICS)
Commitment making (DIDS)
Identification with commitment (DIDS)

Normativity
Normative style (ISI)

Consolidation
In depth Exploration (U-MICS)
Exploration in depth (DIDS)

Petrification

Exploration
Informational style (ISI)
Exploration in breadth (DIDS)

Diffuse-avoidant style (ISI)

Diffusion

Moratorivity
Ruminative exploration (U-MICS)

Defiance
Reconsideration of commitment (U-MICS)

Figure 3. The relations between identity formation constructs from the Erikson-Marcia tradition (Topolewska & Cieciuch, 2017).

The Circumplex Identity Modes Questionnaire (CIMQ; Topolewska & Cieciuch, 2017) was designed to measure the eight identity formation modes. It is a self-report tool consisting of 40 items grouped into eight scales. These indicators assess general identity formation, and are not domain specific.

IDENTITY IN ADULTHOOD – WHITBOURNE'S IDENTITY PROCESSING THEORY

The process-oriented models proposed by Crocetti et al. (2008) and Luyckx et al. (2008), mainly placed identity development in adolescence (consistent with Erikson's view). But there are also theories focused on identity development in adulthood. One such theory was proposed by Whitbourne and colleagues (2002).

The model proposed by Whitbourne and colleagues (2002) is similar to the Neo-Eriksonian perspective, but also immersed in the Piagetian tradition. Identity is treated as an individual's self-representation of psychological, social, and psychical functioning in three identity process categories: *assimilation, accommodation*, and *balance*.

People who mainly use the assimilation process in shaping their identity include identity-important experiences and information into existing self-schemas, even when they receive discrepant information. Their identity structure is rather fragile, their main processing style is self-enhancement, their self-esteem is rather high, and they can be described using the metaphor of the Egoist. Their natural defences are denial and projection and they have a tendency towards narcissism.

Identity accommodators change their identities when they get new information about the self. Their identity structure is also unstable, because their processing style is self-doubt, and their self-esteem is low. They can be described using the metaphor of the Politician. They have a tendency towards depression.

The perfect situation is a balance between these two processes. People who are identity balanced have a stable identity structure, a realistic processing style, and a high but realistic

self-esteem. Their characteristic defence is intellectualization, but they have a tendency towards experiencing anxiety. The metaphor used to describe them is the Scientist. Identity processes of assimilation and accommodation could be compared in some respects to Marcia's (1966) commitment and exploration, respectively. Relatedly, the balance between assimilation and accommodation is the ideal outcome, similar to identity achievement in the identity statuses model.

Table 6. Identity processes in Whitbourne's theory

Construct	Description	Correlates/Research results
Assimilation	The process used to maintain self-consistency even when facing discrepant information or experiences	• Negative affect (Whitbourne, 1996) • Social isolation (Whitbourne, Sneed, & Skultety, 2002) • High self-esteem (Whitbourne & Collins, 1998)
Accommodation	The process of making changes in identity structure as a response to new information and experiences	• Responsiveness to external influences and overreacting • Low self-esteem (Whitbourne, Sneed, & Skultety, 2002)
Balance	The optimal dynamic balance between identity assimilation and accommodation; flexibility	• High self-esteem (Whitbourne, Sneed, & Skultety, 2002) • Optimal aging (Whitbourne & Connolly, 1999)

The brief definitions of the identity processes proposed by Whitbourne, as well as the results of the research, are presented in Table 6. The identity processes proposed by Whitbourne can be measured with a self-report tool known as the Identity and Experiences Scale (IES; Whitbourne, Sneed, & Skultety, 2002). It is a 55-item Likert scale self-report questionnaire consisting of three subscales (identity balance, identity accommodation, and identity assimilation).

MCADAMS' NARRATIVE IDENTITY

McAdams's (1985) narrative perspective is also derived from Erikson's theory, but it is quite different from theories described above. McAdams treats identity as a life story written by the individual themselves. All individuals are building and creating their life stories based on their own experiences of daily life. According to this approach, identity is an effect of actively constructing one's individual life story.

Identity may be treated as a life story or personal myth (McAdams, 2011). Individuals start to develop this story in adolescence and continue throughout their lifetime. As a story, identity consists of various plots, tales, and characters. McAdams doesn't focus on identity dimensions/processes or statuses, but treats identity more holistically - as a product of living individual life (McAdams, 1985). McAdams draws from a personological tradition, perceiving life as integrated story and highlights that this story may only be analysed within a narrative framework.

McAdams (1995) also claims that individuals can be described at three levels of functioning, which can be treated as the *levels* or *layers* of individuality. These levels organize individual differences. The first level consists of *dispositional traits*: the dimensions of personality. The second level consists of *personal concerns*, also called *personal characteristics* or *characteristic adaptations*: life aims and tasks, defence mechanisms, desires, skills and abilities, values, motivations. Identity formation constructs such as dimensions and styles could be located in the second level (Cieciuch & Topolewska, 2017; Hatano, Sugimura, &

McADAMS:

Three levels/layers
of personality

Klimstra, 2016; Klimstra, Luyckx, Goossens, Teppers, & De Fruyt, 2013; Pals Lilgendahl, 2015). The third level consists of *evolving life stories* – frameworks and constructions of personal identity – internalized and constantly developing. Each level requires its own manner and methods of exploring and researching, and thus, knowing only one of the three levels does not contribute to fully knowing the individual and his or her identity. The definitions of three levels as well as the research results concerning their reciprocal relationships are presented in Table 7.

Table 7. Three levels of human functioning according to McAdams's theory (based on McAdams et al., 2004)

Construct	Description	Correlates/Research results
Level 1: Dispositional traits	People's general tendencies to particular behaviors (such as personality traits)	• Level 1 related to Level 2 • Big-Five traits (Level 1) related to goals and values (Level 2)
Level 2: Personal concerns/ Personal characteristics/ Characteristic adaptations	People's concerns, aims, desires, beliefs, and coping mechanisms	• Motives and goals (Level 2) related to life-narrative themes (Level 3) • Goals for power (Level 2) linked to self-mastery, influencing other people, achieving victories and social status • Goals for intimacy related with love friendship, caring for others, etc. • Generativity linked to well-being
Level 3: Life stories	Life story including frameworks and constructs that are unique for every individual (identity)	• Identity narrations linked with motives and goals • Narrative themes linked with openness to experiences, agreeableness, and neuroticism • High openness to experiences linked with life-narrative complexity, innovativeness • Agreeableness linked with communion themes in narrations • Neuroticism linked with negative narrative tone

McAdams (1995) described the main characteristics of identity as a life story. First, there are no two identical life stories: they are unique as individuals, they exist inside a person, they are dynamic and evolving. Then, identity as a life story is a quality of the self but it isn't the same thing: identity can be treated as a specific aspect of the self. In fact, identity is the *storied self*. Importantly, when identity is a story, it has to be interpreted in the terms of stories: narration, plot, characters. Finally, the three levels described above cannot be reduced to one and therein, they can be seen as independent. They are also not hierarchical in order. Identity as a life story integrates an individual's past, present, and future, giving him/her a sense of purpose and meaning. Researchers can explore people's life stories on the third level.

Since identity, according to McAdams's theory, can be examined only with narrative methods, McAdams (1993) developed a life-story interview technique. Using this interview, one can distinguish self-defining memories, prototypical scenes, and nuclear episodes in individuals' narrations (McAdams, 2004). Participants of narrative identity studies are usually asked to write or tell their life-story scenes, including high and low points, turning points, continuity, their most important scenes from various stages of life, earliest memories, life goals, and so on.

Research has shown that individuals who found meaning in suffering and those who revealed personal agency and exploration in their identity narrations experienced higher well-being and better mental health (McAdams & McLean, 2013). Moreover, the results have shown relationships between narrative identity and personality traits (McAdams et al.,

2004). An emotionally negative tone in identity narrations was linked to neuroticism, communion in narrations with agreeableness, and the complexity of narrations with openness to experience. In narratives, Wilt, Olson, and McAdams (2011) found connections with two higher-order factors of personality structure. Stability (high emotional stability, conscientiousness, agreeableness) and Plasticity (high extraversion and openness to experience) were related to low threat and exploration, respectively. Additionally, identity formation constructs, such as processes and modes, located in the second layer of personality are underpinned by Stability and Plasticity. Namely, Stability underpins the identity commitment constructs and Plasticity underpins the exploration constructs (Hatano et al., 2017; Topolewska-Siedzik & Cieciuch, 2017; Topolewska-Siedzik, Cieciuch, & Strus, 2019; Wilt et al., 2011).

EUDAIMONIC IDENTITY – WATERMAN

Waterman (1982) initially focused on Marcia's (1966) model by proposing patterns and possible identity trajectories over time. He claimed that individuals begin their identity development in diffusion and then can move to foreclosure or moratorium, followed by achievement, or go back to the earlier statuses. In other words, making identity commitments requires moratorium and "moving back" to the "earlier" statuses is always possible. Later, after the status paradigm was criticized for its excessively simplified categorization (Waterman, 2011), Waterman proposed the *personal expressiveness* of identity commitment as a third dimension of identity, separate from commitment and exploration (Waterman, 1993). Personal expressiveness, according to Waterman (2011), refers to the subjective experience of eudaimonia, the highest state of happiness and it is the effect of an achieved identity. Accordingly, personal expressiveness is highest in the identity achievement status and the lowest in the diffusion status.

In his eudaimonistic identity theory, Waterman starts from Aristotle's conception of eudaimonia, which means living the best, most desirable human life. Sometimes this term is translated simply as "happiness" (Waterman, 2011). In this view, the main aim of the identity formation process is to discover the true nature of an individual, their potential and life purposes and to realise their potential and purposes. Waterman aimed to use the eudaimonist perspective to understand the identity formation process. The key eudaimonic features of identity, according to Waterman, are discovering and evolving human potentials, finding the purpose of human life and implementing these potentials and purposes in daily life.

According to Waterman (2011), identity problems can be resolved in three ways: commitment can be made after active exploration (as in the achievement and moratorium statuses), through identification with other people (as in the foreclosure statuses), or it can be not made and as a result identity questions remain unanswered (as in the diffusion status).

To understand identity formation, researchers should consider intrinsic motivation to be inseparably connected to personal expressiveness. The predictors of achieving eudaimonic identity are self-determination, having a set of skills, and the effort put into this developmental process.

We can also speak about *eudaimonic identity commitments* (Waterman et al., 2013). They are characterized by the development of an individual's potential, motivating the individual to activity, they provide a sense of purpose, meaning, and direction, and they are subjectively experienced as personally expressive, however they require some effort. The main aspects of Waterman's theory are presented in Figure 4.
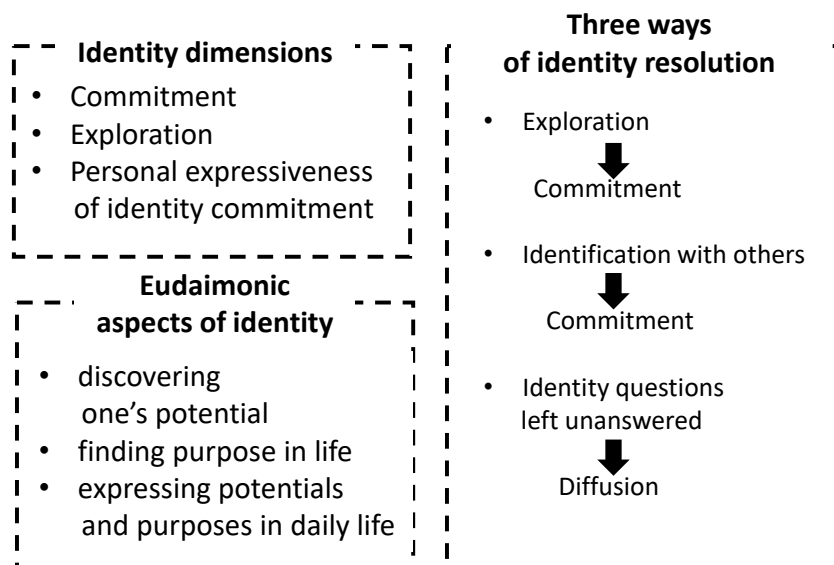
Figure 4. Key elements of eudaimonic identity theory.

So far, mixed methods have been used to measure eudaimonic identity (Waterman et al., 2013). Identity processes have been measured using DIDS (Luyckx et al., 2008) and the quality of identity commitments is measured with the Questionnaire for Eudaimonic Well-Being (QEWB; Waterman et al., 2010). The latter questionnaire was designed to measure the extent to which an individual is engaged in activities reflecting identity commitments (Waterman et al., 2013). Research suggests that eudaimonic identity commitments are positive linked to well-being, self-esteem, internal locus of control, and negatively to anxiety and depression (Waterman et al., 2010).

CONCLUSIONS AND POSSIBLE FUTURE DIRECTIONS

As was shown in the current review, identity is a core concern in contemporary developmental psychology. This area is growing even more rapidly in recent years: new theoretical models are being developed and new questionnaires are being used. Research is extending and it is not only focused on examining the relationships between processes/dimensions/styles, but also on developmental trajectories in identity formation, as well as the predictors and consequences of identity.

Most of the models discussed in this paper have been examined widely during the last couple of years (for an extended review see Schwartz, 2011, 2017). Contemporary research has analysed numerous identity correlates (such as personality traits, personal relationships, health, well-being, and adjustment or values preferences) and has been conducted in various countries, even beyond the Western cultural context (Hatano & Sugimura, 2017; Skhirtladze et al., 2016; Sugimura & Mizokami, 2018). The new personal identity models are focused on how identity is formed (process-oriented models, identity styles), on the content of identity (narrative identity), or on both (for example, examining various identity domains in the process-oriented paradigm) or on discovering one's identity by examination of one's own potential (i.e. eudaimonic identity). A comparison of the most frequently examined contemporary perspectives is presented in Table 8.

Table 8. Contemporary perspectives on personal identity formation

Theory	Key notions	Method
Marcia's Identity Status Paradigm	Two processes: *commitment, exploration* Four statuses: *achievement, foreclosure, moratorium, diffusion*	Ego Identity Incomplete Sentences Blank (EI-ISB; see Kroger & Marcia, 2011) Identity Status Interview (ISI; Marcia, 1966) Extended Objective Measure of Ego Identity Status II (EOM-EIS-II; Marcia, 1993)
Crocetti et al.'s Three Factor Model	Three processes: *commitment, in-depth exploration, reconsideration of commitment* Two cycles: *identity formation, identity maintenance* Five statuses: *achievement, early closure, moratorium, searching moratorium, diffusion*	Utrecht Management of Identity Commitment Scale (U-MICS; Crocetti, Rubini, Luyckx et al., 2008)
Luyckx et al.'s Five Dimensional Model	Five processes: *commitment making, identification with commitment, exploration in breadth, exploration in depth, ruminative exploration* Two cycles: *identity formation, identity evaluation* Five statuses: *achievement, moratorium, foreclosure, diffused diffusion, carefree diffusion*	Dimensions of Identity Development Scale (DIDS; Luyckx et al., 2008)
Berzonsky's Social-Cognitive Model	Three identity styles: *informational, normative, diffuse avoidant*	Identity Styles Inventory (ISI-5; Berzonsky et al., 2013)
Cieciuch and Topolewska's Identity Circumplex Model	Eight modes of identity formation: *socialization, consolidation, exploration, moratorivity, defiance, diffusion, petrification, normativity*	Circumplex Identity Modes Questionnaire (CIMQ, Topolewska & Cieciuch, 2017)
Whitbourne's Identity Processing Theory	Identity in adulthood Three processes: *assimilation, accommodation, balance*	Identity and Experiences Scale (IES; Whitbourne, Sneed, & Skultety, 2002)
McAdams' Narrative Identity	Identity as a life story Three levels of individuality: *traits, personal characteristics, evolving life stories*	Life Story Interview (McAdams, 1993)
Waterman's Eudaimonic Identity	*Eudaimonia Personal expressiveness + commitment* and *exploration*	Dimensions of Identity Development Scale (DIDS; Luyckx et al., 2008) Questionnaire for Eudaimonic Well-Being (QEWB; Waterman et al., 2010)

Identity can be studied using pen-and-paper methods, narrative interviews, or mixed methods. There are thousands of articles (for a review see Schwartz, Luyckx, & Crocetti, 2015) examining identity. The most frequently examined identity correlates are family relationships, personality, various aspects of well-being, internalizing and externalizing symptoms, and problematic behaviours (Schwartz et al., 2015).

The need to make connections and provide a theoretical integration between the variety of theoretical approaches has been noted some time ago (Schwartz, 2001). Some efforts have been made, for example by linking identity commitment to the eudaimonic perspective

(Waterman & Schwartz, 2013); by proposing the notion of identity consolidation, defined as developing identity capital, through making commitments and experiencing oneself as a valuable member of society (Schwartz, 2007); or by linking identity styles with statuses (Crocetti et al., 2013; Negru-Subtirica, Pop, & Crocetti, 2017), and the structural analyses of the five dimensional models to derive an additional dimension – reconsideration of commitment (Zimmermann, Lannegrand-Willems, Safont-Mottay, & Cannard, 2015).

However, these attempts link fragments of existing theories or methods, but they do not capture "the wholeness" of identity. Each of the presented models focuses on a slightly different aspect of identity formation. However, it is possible to find similarities between them: for example, both the Crocetti and colleagues' (2008) and the Luyckx and colleagues' (2008) models have in-depth type of exploration, Whitbourne's (1996) accommodation and assimilation are similar to Marcia's (1966) exploration and commitment, and Berzonsky's (1989) normative identity processing style is similar to Marcia's (1996) foreclosure status. Still, there are many co-existing models in the literature but few attempts to integrate these existing models. One of the few attempts at integration has been made by Cieciuch and Topolewska (2017), who proposed the Circumplex Model of Identity Formation Modes by combining existing knowledge and various theoretical models from the Marcia approach. The main aim of the CIFM model is to establish a framework under which identity-related constructs could be gathered together and the relations between them could be organized and presented systematically.

Marcia's (1966) identity model and the models derived from it have been validated in Europe (including post-communist countries; Negru-Subtirica & Damian, 2018; Skhirtladze et al., 2016), the United States, as well as in some non-Western cultures, such as Far East and African Countries (see Kroger, 2015), and Japan which is characterized by the elements of both collectivism and individualism (Hatano & Sugimura, 2017; Sugimura & Mizokami, 2018). An extended review of identity research conducted in Marcia's tradition was presented by Schwartz (2011, 2017). However, it is important to note that cultural aspects are a strong factor in influencing the level and the dynamics of identity processes (see Hatano & Sugimura, 2017; Negru-Subtirica & Pop, 2018). These cultural influences on identity processes may be due to the differences in socio-economic systems, parental attitudes, the values promoted in educational system (Negru-Subtirica & Damian, 2018) or the differences between individualistic and collective cultures (Hofstede, 2001).

One important factor related to possible differences in identity development between Western and non-Western cultures may be values, which can be treated as an important element of identity content (Berzonsky, Cieciuch, Duriez, & Soenens, 2010). For instance, in different societies have different value preferences (e.g., family values versus individualistic values). These value preferences can have a strong impact on future educational and vocational decisions and further development (Negru-Subtirica & Damian, 2018). However, differences are not limited to those found between Western and non-Western contexts. For example, in Europe there are dissimilarities in identity dimensions between countries from either side of the Iron Curtain (Negru-Subtirica & Damian, 2018; Shkirtladze et al., 2016). These differences may be the result of factors such as socio-economic and historical contexts impacting the educational choices of young people or leading to valuing different life achievements, which can influence identity commitments.

Thus, when examining identity, one should always consider the context (such as socio-economical or cultural) and the specifics of sample population. In the future, more effort should be put into integrating existing perspectives, rather than into proposing completely new models. Researchers should strive to examine the various identity contexts/domains, while taking cultural contexts into account, to use mixed-methods research and to capture the developmental processes underlying identity formation.

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Measurement of narcissism: From classical applications to modern approaches

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ABSTRACT

Different conceptions of narcissism exist within the literature such as grandiose, vulnerable, pathological, collective, and communal, each of which can be measured using self-report measures. Within the current paper, we review and discuss most of the existing measures of these different trait (i.e., non-clinical) narcissism constructs. This includes an examination of their underlying theoretical foundations and an evaluation of the scale construction process. We start our review from the one-dimensional measures of grandiose and vulnerable narcissism such as the Narcissistic Personality Inventory, the Hypersensitive Narcissism Scale, the Dark Triad Dirty Dozen, the Short Dark Triad, the Narcissistic Grandiosity Scale, the Narcissistic Vulnerability Scale, and the Single Item Narcissism Scale. Then, we introduce the multidimensional measures to study narcissism such as the Narcissistic Admiration and Rivalry Questionnaire, the Five Factor Narcissism Inventory, and the Pathological Narcissism Inventory. The review concludes by presenting measures of understudied narcissistic constructs such as the Communal Narcissism Inventory and the Collective Narcissism Scale. In general, using one-dimensional scales might provide important insights into the general underpinnings of narcissistic personality, however assessment via multi-dimensional tools better reflects its complex nature.

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Summary of the narcissism measures described in this paper

Abbreviation	Full name	Reference
NPI	Narcissistic Personality Inventory	Raskin & Hall (1979)
HSNS	Hypersensitive Narcissism Scale	Hendin & Cheek (1997)
DTDD	Dark Triad Dirty Dozen	Jonason & Webster (2012)
SD3	Short Dark Triad	Jones & Paulhus (2014)
SINS	Single Item Narcissism Scale	Konrath, Maier, & Bushman (2014)
NGS	Narcissistic Grandiosity Scale	Crowe, Carter, Campbell, & Miller (2016)
NVS	Narcissistic Vulnerability Scale	Rosenthal, Hooley, Montoya, van der Linden, & Steshenko (2019)
PNI	Pathological Narcissism Inventory	Pincus, et al. (2009)
FFNI	Five Factor Narcissism Inventory	Glover, Miller, Lynam, Crego, & Widiger (2012)
NARQ	Narcissistic Admiration and Rivalry Questionnaire	Back, et al. (2013)

INTRODUCTION

Narcissism can be defined as *entitled self-importance* (Krizan, 2018) that itself can be expressed as two phenotypes: *grandiosity* (regarding self-aggrandizement and self-absorption; Morf & Rhodewalt, 2001) and *vulnerability* (reflecting feelings of inadequacy, incompetence and negative affect; Miller et al., 2011). These two-factor models of narcissism (i.e., grandiose and vulnerable) can be further described using three dimensions. At the core of both grandiose and vulnerable narcissism is entitled self-importance (Narcissism Spectrum Model, NSM; Krizan & Herlache, 2018), or antagonism/disagreeablenss (Trifurcated Model of Narcissism; Campbell & Miller, 2017; Miller, Lynam, Hyatt, & Campbell, 2017).

The current paper aims to present and discuss contemporary measures of non-clinical narcissism, reflecting up-to-date findings in the field. For this reason, we present information about the process of construction and validation and discuss the convergence and divergence between single- and multidimensional narcissism scales. Moreover, as narcissism is a complex construct, we interpret how most of the existing measures of non-clinical narcissism measures refers to its dimensions.

SINGLE PHENOTYPE MEASURES OF NARCISSISM

NARCISSISTIC PERSONALITY INVENTORY (NPI; RASKIN & HALL, 1979)

Theoretical foundations. The NPI was developed as a measure of narcissism during the late 1970's (Raskin & Hall, 1979). The initial item pool of the NPI was created to capture the eight diagnostic criteria for narcissistic personality disorder (NPD) in the DSM-III: grandiose sense of self-importance, preoccupation with fantasies, exhibitionism, cool indifference or marked feelings in response to criticism, entitlement, interpersonal exploitativeness, fluctuating relationships, and a lack of empathy (APA, 1980). Because the NPD diagnostic criteria (as opposed to the clinical description) are saturated with grandiosity, the NPI emerged as a measure of grandiose narcissism rather than capturing both grandiosity and vulnerability. The initial pool of items comprised 223 pairs of forced-choice sentences covering all of the DSM-III NPD criteria. Namely, each pair comprised one narcissistic and one non-narcissistic response and the respondent was forced to choose only one of them.

Construction. First, Raskin and Hall (1979) administered this measure to a sample of *N* = 71 students. Second, this sample was divided into two subsamples scoring either low or high on the overall score, each with *n* = 20 students. Third, each item was compared between the high and low subsamples, and if the difference was significant the item was retained, if not – the item was removed. This procedure resulted in the generation of 80 pairs of items, which formed two parallel and equivalent forms of the questionnaire, (i.e., NPI A and NPI B; Raskin & Hall, 1979). During follow-up studies, additional items were removed in order to maximize reliability and item-total correlations, which resulted in a 54-item measure of narcissism understood as a unidimensional construct (Raskin & Hall, 1979, 1981; Raskin & Terry, 1988).

Further development – towards multidimensionality. The generated pool of 54-items was independently reduced using a factor-analytic approach by Emmons (1984, 1987) and Raskin and Terry (1988) to 37- and 40-item multidimensional measures, respectively. Emmons (1984, 1987) argued that there are four factors labeled as: 1) Exploitativeness/Entitlement, Leadership/Authority, Superiority/Arrogance, and Self-absorption/Self-admiration while Raskin and Terry (1988) advocated the existence of seven distinct factors labeled: 1) Authority, 2) Self-Sufficiency, 3) Superiority, 4) Exhibitionism, 5) Exploitativeness, 6) Vanity, and 7) Entitlement. The construction of the 40-item version of the NPI (Raskin & Terry, 1988) was the last classical reduction of the items and it is still, 30 years later, frequently used in research on narcissism.

Modern versions of the NPI. Existing research has demonstrated that the factorial structure of the NPI is unstable (e.g., Barelds & Dijkstra, 2010; Kansi, 2003; Svindseth et al., 2009); however, some of the existing models are describing the underlying structure more precisely than the others. Ames, Rose, and Anderson (2006) proposed that the NPI can be shortened just to 16-items while maintaining good overall reliability and covering the breadth of the construct. Although this goal is plausible, the factorial validity of the NPI-16 has yet to be clearly established. Ackerman et al. (2011) synthetized previous research, analyzed the full version of the NPI, and claimed that the three-factor model is the best to describe the NPI's structure. The three factors were assigned to the normal (Leadership/Authority) or antagonistic aspects narcissism (with Grandiose Exhibitionism as an intra- and Entitlement/Exploitativeness as an interpersonal cluster). This model was tested in Gentile et al. (2013) who proposed a brief 13-item measure. Although it yielded good model fit and the structure was partially replicated in different cultures (Żemojtel-Piotrowska et al., 2018), it also inherited some of the weaknesses of the original NPI. For instance, three out of five Grandiose Exhibitionism items with highest factor loadings actually refer to body

satisfaction and exhibitionistic tendencies (e.g., *I like to show off my body*), suggesting that vanity may be overrepresented. Finally, Ackerman et al. (2016) tested the effects of the response format on the underlying structure of the NPI. The results suggested that using a single stimulus response format changes the underlying structure as five meaningful factors could be differentiated. More recent research, however, has found that using a forced-choice vs. a Likert-type scale on the NPI does relatively little to change the NPI's validity (Miller et al., 2018).

Discussion of the development of the NPI. The original 223 dyadic items were created to cover all of the DSM-III (APA, 1980) NPD criteria, which itself can be seen as a satisfactory theoretical foundation covering all of the important aspects of narcissism. However, as narcissism was initially conceptualized as a unidimensional construct without any particular facets, the whole process of data reduction did not attempt to evenly retain items referring to specific NPD criteria. In fact, some of these criteria refer to aspects of narcissism which have some social potential (like requiring constant attention and admiration), whilst others refer to vulnerable aspects (like marked feelings in response to criticism and indifference of others or defeat). In the initial step, where 143 dyadic items were removed, Raskin and Hall (1979) compared 40 individuals who scored low (20) vs high (20) on narcissism from an initial sample of 71 students. As the antagonistic aspects of narcissism are less likely to occur than the agentic aspects (Wetzel et al., 2016), many of the items from the initial item pool referring to the antagonistic character of narcissism were presumably removed during the scale reduction process. Moreover, the scales capturing socially malevolent aspects tend to have lower reliability (Ackerman et al., 2011). However, Raskin and Hall (1979) also removed such items during the development of the NPI in order to maximize reliability, which resulted in an uneven coverage of antagonistic and agentic aspects by the NPI. Although modern versions of the NPI have been developed (Ames et al., 2006; Gentile et al., 2013) and the classical version has been tested under different response formats (Ackerman et al., 2016) all of them inherited the strengths and the weaknesses of the original NPI. Thus, although the NPI provides useful information about grandiose narcissism, it is not as detailed and precise as the multidimensional narcissism measures.

HYPERSENSITIVE NARCISSISM SCALE (HSNS; HENDIN & CHEEK, 1997)

Theoretical foundations. The HSNS was developed as a measure of vulnerable narcissism in response to the seminal study of Wink (1991) who noted that there is a lack of correlation between the NPI and the NPD scales, demonstrating that narcissism is not only about grandiosity, but that it also includes a distinct phenotype known as vulnerability-sensitivity. This face of narcissism was shown to have significantly lower well-being, poorer personal adjustment, and to be more emotional, worrying, anxious, and tense (Wink, 1991). Hendin and Cheek (1997) followed this theoretical distinction and compared it to Murray's (1938) distinction between overt and covert narcissism, which theoretically might be compared to the dimensions distinguished by Wink (1991) as overt narcissism is characterized by aggressiveness, self-aggrandizing, exploitativeness, and delusions of grandeur, whereas covert narcissism is characterized by a proneness to feel neglected or belittled, anxiousness, hypersensitiveness, and delusions of persecution.

Construction. The HSNS was developed on the basis of the 20-item Murray's Narcism Scale (1938). It was administered to samples with total *N* = 260 alongside the Narcissistic Personality Disorder Scale (Ashby, Lee, & Duke, 1979), the Serkwonek (1975) Narcissism-Hypersensitivity Scale, the NPI (Raskin & Terry, 1988), and the Big Five Personality Inventory (John, Donahue, & Kentle, 1991). Two of these scales (i.e., Ashby et al., 1979; Serkwonek, 1975) were combined to produce the composite MMPI-based (as demonstrated

in Wink, 1991) measure of covert narcissism. Each item from Murray's (1938) scale was correlated with the MMPI composite and the NPI and items which correlated positively with the MMPI composite score were selected to form the HSNS (Hendin & Cheek, 1997). The remaining ten items, which did not correlate at all or correlated with NPI – were removed from the measure. The HSNS demonstrated a clearly different pattern of relations with the Big Five traits than the NPI as it was positively correlated with neuroticism (NPI, n.s.), negatively with extraversion, openness to experience (NPI positively) and agreeableness (NPI, n.s.).

Discussion of the development of the HSNS. Whereas a massive amount of research was devoted to analyzing the NPI structure in different cultural contexts and confirmed that the NPI is not an unidimensional measure (Corry, Merritt, Mrug, & Pamp, 2008), there is a lack of similar studies devoted to the HSNS. Arble (2006) suggested that the HSNS comprises three factors, while Fossati et al. (2009) claimed that the HSNS comprises not one nor three, but two-factors related to oversensitivity to judgement and to egocentrism. Because this underlying factorial structure was not further replicated nor challenged and neither of the existing studies used more stringent statistical techniques (e.g., confirmatory factor analysis), the underlying structure of the HSNS remains unclear.

NARCISSISM IN THE DARK TRIAD

Theoretical foundations. Grandiose narcissism is considered to be a part of a broader personality construct labeled as the Dark Triad of personality, which comprises three socially malevolent traits: narcissism, psychopathy, and Machiavellianism (Paulhus & Williams, 2002). Although it is frequently assessed using independent measures, two brief measures were developed to study all of the Dark Triad traits simultaneously. The theoretical foundations of narcissism within the Dark Triad are based on the conceptualization of grandiose narcissism, and especially the NPI.

Dark Triad Dirty Dozen (DTDD; Jonason & Webster, 2012). The scale was developed in response to the growing research interest in the construct of Dark Triad, of which measurement was inefficient (i.e., standard measures required 91 items; Jonason & Webster, 2012). Therefore, authors originally developed 22 items tapping into central features of all Dark Triad traits (11 for narcissism, 6 for psychopathy, and 5 for Machiavellianism), which were inspired by the original Dark Triad measures (and in the case of narcissism – the NPI; Raskin & Terry, 1988). All of the generated items were the subject of a principal component analysis in two independent studies, and the four items with highest factor loading on the first rotated factor were retained in the final version. The confirmatory factor analysis verified that the distinguished three-factor structure was well-fitted to the data. In regard to the correlates of narcissism, the results provided by Jonason and Webster (2012) demonstrated that it is only moderately associated with the NPI total score (Raskin & Terry, 1988), weakly related to basic personality traits (rs < .20) when a standard measure, the Big Five Inventory, was used (Benet-Martinez & John, 1998), and weakly (*r* = -.13) but negatively to self-esteem (as measured by Rosenberg Self-Esteem Scale; Rosenberg, 1965), which challenges the criterion validity of narcissism as measured by the DTDD.

Short Dark Triad (SD3; Jones & Paulhus, 2014). The SD3 was developed as an alternative to the DTDD for capturing the Dark Triad traits (Jones & Paulhus, 2014). The initial item pool, created from the Jones and Paulhus (2011) review of the literature covering key aspects (for narcissism: leadership, exhibitionism, grandiosity, and entitlement) of each Dark Triad trait, included 41 items. The items were reduced in a three-step procedure: first, eight items which failed to load on the first unrotated principal component were removed; second, five items which cross-loaded in exploratory factor analysis were removed; and third, items

with lowest loadings in psychopathy were removed to keep the scales equal (nine items) in length. All of the key aspects of narcissism were maintained, however most of them (four) captured grandiosity, two items each covered entitlement and exhibitionism, and one item captured leadership. Among these, five items were heavily inspired by the NPI. The underlying structure was confirmed using exploratory structural equation modeling, in which a measurement model fitted the data well, however the strength of the factor loadings of four items were below .40. Narcissism as measured by the SD3 turned out to be highly convergent with the NPI (Raskin & Terry, 1988), and had acceptable to good reliability estimates ranging from .68 to .80.

DISCUSSION OF NARCISSISM IN THE DARK TRIAD

The research on the Dark Triad is flourishing (Furnham et al., 2013); however the inclusion of narcissism in the construct is not obvious. Existing research demonstrates that when the hierarchy of the Dark Triad is analyzed, narcissism is the very first to differentiate, suggesting its distinctiveness (Rogoza & Cieciuch, 2018). The measures of the Dark Triad traits seem to benefit from this difference, as the order of items in SD3 is not random, but the narcissistic items split up Machiavellianism and psychopathy (Jones & Paulhus, 2014), which might influence the obtained factorial structure (Podsakoff et al., 2012). Whilst Paulhus (2014) defines that a trait might be a part of "dark personality" if it is socially aversive, research demonstrates that narcissism frequently has socially desired correlates (Ackerman et al., 2011). It turns out that when narcissism, as measured by SD3, was compared with the NARC dimensions, it was more strongly related to the extraverted side of narcissism (i.e., admiration, while the antagonistic side of narcissism; rivalry was more strongly related to psychopathy and Machiavellianism; Rogoza, Kowalski, & Schermer, 2019). Thus, including rivalry instead of or in addition to narcissism as conceptualized by the Dark Triad measures might shed new light on the antagonistic outcomes of narcissism and its utility in the construct of the Dark Triad.

MEASURING (GRANDIOSE?) NARCISSISM: SINGLE-ITEM SCALE

The Single Item Narcissism Scale (SINS; Konrath, Maier, & Bushman, 2014) was designed to measure grandiose narcissism. It consists of one statement: "To what extent do you agree with this statement: I am a narcissist. (Note: The word 'narcissist' means egotistical, self-focused, and vain.)" with 11-point scale of answering (Konrath et al., 2014, p. 3). Authors validated the SINS in a series of 11 studies, indicating that the SINS is moderately correlated to general NPI scores. However, its relation to particular aspects vary from moderate ($r > .30$; Vanity, Exhibitionism, Exploitativeness) to rather weak ($.30 > r > .20$, Superiority, Entitlement, Authority) to insignificant (Self-Sufficiency). Van den Linden & Rosenthal (2016) examined the validity of the SINS, and concluded that despite its positive relationship with some grandiose narcissism measures (e.g., NPI and NGS) the SINS also captures some vulnerability, for example due to a slightly negative correlation with self-esteem. Despite the enthusiasm stemming from the these two validation studies with regards to the usefulness of the SINS as a screening tool, the complexity of the narcissism construct leads to a lack of clarity about the precise form measured by this scale and thus, future research is needed to better locate the SINS within the dimensions of the NSM (Krizan, 2018).

ADJECTIVE MEASURES OF NARCISSISM – THEORETICAL FOUNDATIONS

A useful approach to measuring narcissism is offered by adjective measures. First, they are brief, and as a result they are less context dependent than classical items. Secondly, they are less biased and more intuitive than typical items describing attitudes and behaviors, as adjectives are typically used in self-perception. Finally, there is a substantial body of research, originating in the field of social cognition, showing that adjectives can be used in the assessment of morality/communion and agency. Namely, adjectives may be used to assess the fundamental dimensions of self and others perception (Wojciszke & Abele, 2007), which is indicative of measurement invariance across different cultures and languages (Abele, et al., 2016). Crowe and colleagues (Crowe, Carter, Campbell, & Miller, 2016; Crowe et al., 2018) used adjective measures of narcissism to assess fluctuations in the levels of grandiose and vulnerable narcissism, as adjectives (e.g., "self-absorbed") allow for asking about one's current state, contrary to more general statements such as "I like having authority over others".

NARCISSISTIC GRANDIOSITY SCALE (CROWE ET AL., 2016; ROSENTHAL ET AL., 2019)

Construction. The NGS contains 16 items in adjective form, with a 7-point Likert-type scale. Adjectives are designed to measure grandiose narcissism as a homogenous phenomenon, therefore it is assumed to be unidimensional. The NGS was designed to capture the more narrowly defined narcissistic grandiosity, specifically, an internal feeling of superiority, without the interpersonal aspects of narcissism related to entitlement (Crowe et al., 2016). The scale was originally developed by Rosenthal and colleagues in 2007, but was published afterwards (Rosenthal et al., 2019). Despite this, the scale was used in numerous studies, which provided evidence for its good psychometric properties including its validity (Brown et al., 2009; Gentile et al., 2013; Miller et al., 2014). In particular, the NGS scores were positively correlated to the general scores of the NPI (Gentile et al., 2013), as well as to agreeableness and extraversion (Miller, Price, & Campbell, 2012). Interestingly, more extensive and systematic validation was done by Crowe et al. (2016). In addition to the validation of the scale, the authors aimed to create a shorter version of the NGS suitable for ecological momentary assessment (EMA) studies. The authors looked at the correlation patterns with established measures of personality as well as with narcissism and its nomological network, and especially entitlement, self-esteem, and interpersonal problems. On the basis of IRT analyses, Crowe et al. (2016) proposed and compared the 13-item and 6-item versions. The former was equally as good as its full version counterpart, while the 6-item version was recommended for repeated surveys, where the assessment of one's current state is especially important.

NARCISSISTIC VULNERABILITY SCALE (CROWE ET AL., 2018)

Construction. The NVS is an 11-item adjective-based assessment of vulnerable narcissism. This scale aims to assess vulnerable narcissism as a trait, and as a state. This last aim was particularly important, as the authors designed the NVS to capture fluctuations in vulnerable narcissism. The scale was constructed on the basis of 24 adjectives selected as relevant to vulnerability and then assessed by 17 experts in the field. Finally, 15 expert ratings were included in the analysis, and their evaluations were highly consistent. As a result, 12 items were selected for validation in three samples: two convenience samples, and one sample of psychology students. None of these samples included a clinical population. The final version consists of 11 items (one item was excluded due to redundancy). A one factor structure was

successfully verified using both CFA and multilevel EFA, as the psychology student sample used a diary method . Namely, participants were interviewed using an EMA procedure with a week-long period, including a survey each morning, and six additional surveys spaced throughout the day on a blocked random schedule. During the survey, participants were asked about the "current situation" and therefore the procedure referred to their state and not to their general disposition (Crowe et al., 2018). Validation was based on correlations with an assortment of established personality and narcissism scales. The correlations were stronger for vulnerability measures than for scales measuring grandiosity and self-importance, providing support for the NVS validity.

DISCUSSION OF THE ADJECTIVE MEASURES OF NARCISSISM

Despite the fact that the NGS and the NVS were designed to measure grandiosity/agentic extraversion and vulnerability/neuroticism exclusively (Crowe et al., 2016; Crowe et al. 2018), it seems that they also capture some elements of self-importance; however these elements different in nature between the NGS and the NVS. Weiss, Campbell, Lynam, and Miller (2019) argued that although antagonism is indeed the core trait of narcissism, which is in line with the NSM (Krizan & Herlache, 2018), its role is different across grandiose and vulnerable narcissism. More specifically, the antagonistic traits vary across them with more internalized expressions (e.g., anger) being more typical for vulnerable narcissism and more externalized expressions (e.g., aggression) being prototypical for grandiose narcissism (Weiss et al., 2019). The NGS correlates strongly with indicators of the entitlement dimension such as the Psychological Entitlement Scale (Campbell, Bonacci, Shelton, Exline, & Bushman, 2004), and also to a lesser extent with measures of vulnerable narcissism. In turn, whereas the NVS correlates weakly and negatively with most of the grandiosity measures, it is also positively associated with entitlement indicators such as narcissistic rivalry (Back et al., 2013). Indeed, both the NGS and NVS lists of adjectives, in addition to the dimension specific words (e.g., glorious and superior in the NGS and fragile and self-absorbed in the NVS), refer to antagonism (e.g., envied, dominant for the NGS and envy, irritable for the NVS). Wright and Edershile (2018) suggest that the NGS is a pure marker of grandiosity/ agentic extraversion. However, as there is not enough empirical evidence to claim this unambiguously, especially in regard to the role of antagonism in narcissism, further research is needed.

Interestingly, virtually all of the adjectives in the NGS refer to the agentic domain, such as prominent, brilliant, dominant, or powerful, while the adjectives in the NVS refer to the negatively valued agentic (e.g., ignored, misunderstood, insecure) and communal domains (e.g., resentful, envious), albeit this might be the result of referring to negative internal states. This demonstrates the dominance of the agentic conceptualization of narcissism in research (see Gebauer et al., 2012 for discussion). This default focus on agency in measuring grandiose narcissism is congruent with the observed dominance of agentic (over communal) content in maintaining high self-esteem (Wojciszke, Szymkow, & Abele, 2008) and focus on agency among narcissistic individuals (Grijalva & Zhang, 2016). However, as recent works on communal self-enhancement suggest, this could reflect either grandiose or vulnerable expressions (Gebauer & Sedikides, 2018). Whilst the NGS measures only the agentic form of grandiose narcissism, the NVS includes both aspects, and therefore one could posit that mixing two the domains in one measure could lead to confusing and ambiguous results.

MULTIDIMENSIONAL MEASURES OF NARCISSISM

PATHOLOGICAL NARCISSISM INVENTORY (PNI; PINCUS ET AL., 2009)

Theoretical foundations. The underlying assumption is that it is possible to distinguish between normal and pathological expressions of narcissism, both of which are distinct dimensions of personality (Pincus et al., 2009). Pincus argued that normal narcissism (or subclinical; Paulhus & Williams, 2002), which is present in all individuals, refers to characteristis of narcissism such as achievement motivation, high self-esteem and well-being or low depression, whereas pathological narcissism is more associated with the clinical, as pathological regulatory deficits and antagonistic strategies to cope with ego-threatening situations (Pincus et al., 2009). Cain, Pincus, and Ansell (2008), in their review of clinical and social/personality psychology literature, argued that pathological expressions of narcissism disclose themselves in both grandiosity and vulnerability.

    Construction. Pincus et al. (2009) noted that in clinical practice, pathological expressions of narcissism were typically assessed using semistructured diagnostic interviews or using multidimensional pathology inventories (e.g., MMPI), which made the diagnosis inefficient. Because the existing measures of narcissism (i.e., the NPI and the HSNS) did not comprehensively assess clinically meaningful facets of pathological narcissism, Pincus et al. (2009) developed and validated the Pathological Narcissism Inventory. On the basis of a thorough review of the literature (Cain et al., 2008) and in consultation with professionals working with narcissistic patients, 131 items were developed covering seven dimensions representing vulnerable (contingent self-esteem, devaluing of others and need for others, narcissistic social avoidance) and grandiose (exploitativeness, entitlement, grandiose fantasies, and self-sacrificing self-enhancement) expressions of pathological narcissism. The PNI also borrows items directly from the NPI. This original pool of items was initially reduced to 105 items through the authors' ratings. This pool was explored in a principal component analysis on a sample of college students (N = 796), which suggested that a seven-component solution is optimal. The item pool was then reduced to 50 items on the basis of their component loadings, item intercorrelations, and their contribution to reliability. The selected items converged with the expected theoretical dimensions, however to increase the fidelity of measurement, two items were removed, two revised, and four were added resulting in a final version comprising 52-items. This 52-item measure was then used in a confirmatory factor analysis on an independent sample (N = 2,801), which confirmed the seven correlated-factor structure of the PNI (although 13 error covariances between similarly worded items were introduced in the measurement model). All of the scales were moderately intercorrelated (mean r = .40) and reliable in their measurement with estimates ranging from .78 to .93. A subsequent study by Wright, Lukowitsky, Pincus, and Conroy (2010) examined the higher order factor structure of the PNI and provided evidence that narcissistic grandiosity (PNI-G; loaded by exploitativeness, self-sacrificing self-enhancement, and grandiose fantasies) and vulnerability (PNI-V; loaded by contingent self-esteem, hiding the self, devaluing, and entitlement rage) can be meaningfully assessed using the PNI. Note, however, that grandiosity as assessed by the PNI does not contain the extraversion and surgency of other grandiose narcissism measures.

FIVE FACTOR NARCISSISM INVENTORY (FFNI; GLOVER, MILLER, LYNAM, CREGO, & WIDIGER, 2012)

Theoretical foundation. The Five-Factor Model of narcissism was proposed on the basis and in correspondence with the Five-Factor Model of personality (FFM; Costa & McCrae,

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PINCUS ET AL.:

Pathological narcissism reflects maladaptive personality organizaztion, psychological needs, and regulatory mechanisms

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1995). More specifically, it draws its theoretical descriptions of the prototypical narcissistic traits from the respective facets of the FFM, which capture both – grandiose and vulnerable expressions of narcissism (Glover et al., 2012). Studies which have analyzed expert opinions and meta-analyses of empirical research on the relationship between narcissism and the FFM facets have demonstrated that many of them are associated, especially in regard to agreeableness, but also to extraversion and neuroticism (Lynam & Widiger, 2001; Samuel & Widiger, 2004, 2008; Widiger, Trull, Clarkin, Sanderson, & Costa, 2002). Glover et al. (2012) summarized the existing evidence and proposed that narcissism, within the framework of the FFM, can be presented through the lens of 15 facets, which were labeled: reactive anger, shame, indifference, need for admiration (neuroticism), exhibitionism, thrill-seeking, authoritativeness (extraversion), grandiose fantasies (openness to experience), cynicism/distrust, manipulativeness, exploitativeness, entitlement, lack of empathy, arrogance (agreeableness), and acclaim-seeking (conscientiousness).

Construction. The initial item pool of the FFNI comprised 390 items (30 per scale), which represents narcissistic variants of each selected FFM facet, was administered to $N = 333$ participants. Half of the data was used for item construction and the other for scale validation. On the basis of the strength of the correlation between each of the FFNI items to their respective personality facets and to the eight different narcissism measures, the 148-items with the highest estimates were selected for the final version of the measure. In addition to the full version, a short form comprising 60-items exists (Sherman et al., 2015). The distinguished scales apart from grandiose fantasies were convergent with respective FFM facets (lowest $r = .46$, range .46-.74). The FFNI scales were also correlated with other narcissism measures, revealing that vulnerable scales (i.e., shame, need for admiration, reactive anger, and cynicism/distrust) and grandiose scales (all remaining) correlated most strongly with other vulnerable and grandiose narcissism measures. In addition to the possibility of scoring composites of grandiose and vulnerable narcissism using the FFNI, Miller et al. (2016) conducted an exploratory factor analysis on the FFNI scales and revealed that they can be organized within three higher-order factors corresponding to the basic traits: 1) antagonism (comprising exploitativeness, lack of empathy, entitlement, arrogance, reactive anger, distrust, manipulativeness, and thrill seeking); 2) neuroticism (comprising shame, need for admiration and indifference -reversely scored); and 3) agentic extraversion (comprising acclaim seeking, authoritativeness, grandiose fantasies, and exhibitionism). In regard to other narcissism measures, neuroticism was predominately related to vulnerable narcissism, agentic extraversion was predominately related to grandiose narcissism, while antagonism was related to both grandiose and vulnerable narcissism measures. In regard to the basic traits, distinguished higher-order factors demonstrated the highest correlations as hypothesized, while in regard to self-esteem, a negative relation was found for neuroticism, null for antagonism, and a positive relation for agentic extraversion (Miller et al., 2016). Both scoring possibilities (i.e., distinguishing between grandiose vs vulnerable narcissism and distinguishing antagonism, neuroticism, and agentic extraversion) can be used separately or in conjunction one with another.

NARCISSISTIC ADMIRATION AND RIVALRY QUESTIONNAIRE (NARQ; BACK ET AL., 2013)

Theoretical foundations. The Narcissistic Admiration and Rivalry Concept (NARC; Back et al., 2013) is a theoretical process model of grandiose narcissism, which conceptualizes it as a two-dimensional construct encompassing two distinct but positively related dimensions, disentangling the bright and the dark side of narcissism: admiration, which leads to social status seeking using self-promotion; and rivalry, which is used to avoid social failures through the means of self-defense (Back, 2018; Back et al., 2013). It was developed as an

answer to the difficulty of measuring narcissism using the classical NPI (Back et al., 2013; Raskin & Terry, 1988). Within the NARC framework, the most basic goal of narcissism is to maintain a grandiose view of the self, which can be done using two strategies – agentic (admiration) or antagonistic (rivalry). Each strategy has distinct behavioral dynamics, explained by specific affective-motivational, cognitive, and behavioral facets. Namely, the underlying motivational goal of admiration is striving to be unique, fueled by grandiose fantasies, which – especially during the zero acquaintance (Back, Schmukle, & Egloff, 2010) – might result in charming behaviors; whilst the underlying motivational goal of rivalry is striving for supremacy, supported by thoughts of devaluation of other people, which may result in hostile and aggressive behaviors. Thus, as a result, the social interaction outcome of admiration might be social potency, which boosts the ego and catalyzes grandiose fantasies, while the result of rivalry might be social conflict, which threatens the ego and catalyzes the devaluation of others.

Construction. The initial pool of items covering the theoretically defined admiration and rivalry and their corresponding facets was selected and/or optimized in multiple rounds by the authors of the scale (Back et al., 2013), which resulted in a pool of 30 items. These items were the subject of two separate exploratory factor analyses for admiration and rivalry. The non-redundant items with acceptable factor loadings were retained for the final 18-item version of the NARQ. In a subsequent study using a large online sample (*N* = 953), the hierarchical structure was confirmed with a confirmatory factor analysis. The following studies demonstrated that admiration and rivalry scores are temporally stable, shared by outside perceivers, and have distinct nomological networks. There is also a 6-item version of this scale, which has been validated in communality and convenience samples and has good psychometric properties (Leckelt et al., 2018).

DISCUSSION OF THE MULTIDIMENSIONAL MEASURES OF NARCISSISM

All of the aforementioned measures are based on assumption that narcissistic personality has a complex nature. For example, the NARQ and the FFNI remove the single factor problem of the NPI. And, while this creates an opportunity to move field forward, it also creates another problem of making basic interpretation more difficult. The factors distinguished by the NARQ and the FFNI are, however, well aligned with basic personality traits (Miller et al., 2017; Rogoza, Wyszyńska, Maćkiewicz, & Cieciuch, 2016) and thus, are worthy of exploration. All of the multidimensional narcissism measures explore slightly different aspects of grandiose and vulnerable narcissism. Despite the fact that, as compared to the classical methods, each one advances our understanding of narcissism, there are some controversies leading to exciting debates in the field of narcissism research. For instance: what is pathological narcissism? Is narcissistic rivalry a measure of vulnerable narcissism?

The NSM (Krizan, 2018; Krizan & Herlache, 2018), which integrates existing theories of narcissism and elucidates the organization of narcissistic traits, seems to be a good theoretical platform to better understand the inconsistencies and controversies in the field. Within the NSM (Krizan & Herlache, 2018), grandiosity and vulnerability are defined as distinct dimensions of narcissistic personality with a shared dimension of entitlement and egotism. These dimensions are organized within a semicircular structure. Namely, vulnerability and grandiosity are located almost at 90°, and the self-importance dimension is in-between them. The interpretation of this placement may be that while entitled features are shared in vulnerable and grandiose narcissism, some (i.e., those with an angular location exceeding 90°) vulnerable features might be negatively related to grandiose features. Krizan and Herlache (2018) argue that despite the common characteristics of entitlement and arrogance, grandiosity and vulnerability demonstrate distinct functional orientations

and nomological networks. For grandiosity, it is a high approach motivation resulting in an eager and hardy disposition, and for vulnerability it is a high avoidance motivation resulting in a stress-prone and volatile disposition. Among the implications introduced by the NSM, one of the more important is that grandiosity/vulnerability and grandiose/vulnerable narcissism are not interchangeable as the latter, in addition to elevated grandiosity/vulnerability, includes features of self-importance. We believe that there is a need to better empirically and theoretically understand the role of self-importance and other aspects of antagonism in grandiose and vulnerable narcissism, and that this may help us to better understand pathological narcissism.

Miller, Lynam, Hyatt, and Campbell (2017) argue that both grandiose and vulnerable narcissism can be considered as pathological, when their intensity is extreme and when there is clinically significant impairment. However, they disagree that normal and pathological narcissism are distinct dimensions, as the first originates from personality/social psychology and the latter from clinical psychology research (Pincus et al., 2009). Moreover, Miller, Lynam, and Campbell (2016) raise question about the validity of the PNI grandiosity (PNI-G) scale as it demonstrates weak correlations with scales typically associated with grandiose narcissism and it fails to match the expected nomological network of the NPD. Wright (2016) suggests that the PNI-G has different pattern of relations because it was designed as a broad measure of the maladaptive expressions of narcissism and it was not based on the narrowly defined NPD criteria (as the NPI originally was; Raskin & Hall, 1979). While the PNI-G fails to follow the expert rating of the NPD, Wright (2016) notes that the exploitativeness scale does as well as the NPI or FFNI. Miller and colleagues (2016) note that this is solely because this scale was based on items directly taken from NPI. Wright (2016) finally agrees with Miller et al. (2016) that grandiosity is essential in understanding narcissism, however he is not convinced whether it may or may not be overt. On the other hand, Miller et al. (2016) agree that the PNI-G should not be discarded, because it captures a different aspect of grandiosity than the NPI or the FFNI (Wright et al., 2016).

In the terminology of the NSM (Krizan & Herlache, 2018), it could be claimed that the NPI and the FFNI measure narcissistic grandiosity (with some elements of self-importance), while the PNI-G captures grandiose features which are closer to vulnerability (i.e., captures the self-importance dimension with some elements of grandiosity and vulnerability; Wright & Edershile, 2018). This claim was not supported by an empirical analysis of the NSM structure (Krizan & Herlache, 2018), as the PNI-G scales (excluding exploitativeness) loaded primarily on the vulnerability dimension (but their secondary loadings captured self-importance). However, it was supported by the work of Miller et al. (2016) as the PNI-G primarily correlates with agentic extraversion (representing NSM grandiosity), and secondarily with antagonism (NSM self-importance) and also, to small extent, with neuroticism (NSM vulnerability). Among all of grandiose and vulnerable narcissism scales, the PNI-G was the only one to positively correlate with all three dimensions (Miller et al., 2016). This last result corroborates the Pincus et al. (2009) claim that the PNI-G measures the pathological features of grandiosity, and the Miller et al. (2017) claim that vulnerable narcissism is characterized as pathological. Summarizing, the PNI-G diverges from typical measures of grandiosity (Miller et al., 2016; Wright, 2016) as, in the terms of the NSM (Krizan & Herlache, 2018), it captures elements of entitlement as well as grandiosity and vulnerability; however, due to ambiguous empirical evidence (Krizan & Herlache, 2018; Miller et al., 2016) more research investigating its location within the NSM is needed.

Is narcissistic rivalry a measure of vulnerable narcissism? Throughout their work, Miller and colleagues (Miller et al., 2016; Miller et al., 2014) regard rivalry as a measure of vulnerable narcissism, while Back et al. (2013) explicitly state that the NARC and thus–rivalry–does not address vulnerable narcissism, although it was expected that rivalry would be more related to vulnerability. These discrepancies in theoretical perspectives cause confusion,

which may be resolved by the NSM. Krizan and Herlache (2018) do not analyze the NARQ dimensions in structural terms, but they label rivalry as an indicator of entitlement and admiration as an indicator of grandiosity features of the spectrum. As self-importance is a shared narcissistic phenotype, positive associations with grandiosity and vulnerability are expected and observed (Back, 2018; Back et al., 2013; Krizan & Herlache, 2018; Miller et al., 2016; Wright & Edershile, 2018). Using the NSM to interpret the results reported in Miller et al. (2016) simplifies the interpretation, as rivalry correlates stronger ($r = .71$) with antagonism than with vulnerability ($r = .27$), as hypothesized. In addition to the differentiation of the bright (grandiosity) and blue (vulnerability) face of narcissism, including the dark (self-importance) face is also beneficial in the interpretation of the results (Rogoza, Żemojtel-Piotrowska, Kwiatkowska, & Kwiatkowska, 2018). However, when expert ratings are analyzed, rivalry matches highly ($r = .84$) with vulnerable narcissism (Miller et al., 2014) and when they are analyzed jointly, rivalry indeed demonstrates a slight skewness towards vulnerability (Rogoza et al., 2018).

Whereas the theoretical description of rivalry clearly represents antagonistic behaviors typical for grandiose narcissism (Back et al., 2013), the operationalization might actually represent, to some extent, behaviors typical for vulnerable narcissism. Within the NSM, the role of temperament is clearly outlined: Namely, that vulnerability represents an avoidant and grandiosity represents an approach motivation (Krizan & Herlache, 2018). This distinction can be further linked to internalizing (vulnerability) and externalizing (grandiosity) pathology (Wright et al., 2012). Aggressiveness is the facet which is externalizing in nature, however in order to avoid floor effects Back et al. (2013) asked for mild aggressive reactions and internal precursors of aggressive behaviors (e.g., "I often get annoyed when I am criticized"), which in fact represents an internalization (Weiss et al., 2019). Because the experts did not compare rivalry to the self-importance dimension (Miller et al., 2014), its high correlation to vulnerable narcissism might be biased, particularly as aggressiveness represents items that are internalizing in nature. Therefore, further research on expert ratings and a possible revision of the aggressiveness facet are needed to address these problems.

BEYOND NARCISSISM SPECTRUM MODEL

COMMUNAL NARCISSISM INVENTORY (GEBAUER ET AL., 2012)

Theoretical background. The Communal Narcissism Inventory is grounded in the prominent Big Two concept of the duality of human functioning and perception (Bakan, 1966; Helgeson & Fritz, 1999; Wojciszke & Abele, 2008). According to Bakan (1966), agency is expressed through the mastery of the one's environment, the pursuit of individual goals, a focus on own achievements, power, competence, and self-assertion, while communion is related to a human focus on closeness to others, cooperation, and belonging (see Żemojtel-Piotrowska, Piotrowski, & Clinton, 2017).

The agency-communion model is particularly important in the explanation of self-perception and self-esteem. For instance, Tafarodi and Swann (1995) indicated that the Rosenberg self-esteem scale (Rosenberg, 1965) refers to two distinct components: self-liking and self-respect. Typically, people enhance themselves in the agentic domain (Wojciszke et al., 2008), which is typical for the grandiosity dimension (Gebauer, Paulhus, & Neberich, 2013; Rogoza, 2018). For this reason, grandiose narcissists enhance their intelligence, physical attractiveness, power skills or creativity, but **do not** enhance their morality, empathy, or friendliness (Campbell, Rudich, & Sedikides, 2002; Gebauer et al., 2012; Gebauer & Sedikides,

2018). However, enhancing in the communal domain is also theoretically plausible. There are people who present themselves as saints or super-heroes (Paulhus & John, 1998), stressing their exceptional modesty, trustworthiness, and caring (Gebauer & Sedikides, 2018). In addition, despite the fact that people tend to build their self-esteem on the basis of agency rather than communion, they are nevertheless interested in convincing others of their high morality and communion. This is related to the difference between self-profitable traits, like intelligence and others-profitable traits, like honesty (Peeters, 1992; Wojciszke et al., 2011). Therefore, individuals interested in maintaining satisfactory social relationships, are interested in presenting themselves as highly communal and therefore communal narcissism is not only plausible, but also could be socially profitable (Gebauer & Sedikides, 2018; Kwiatkowska, Jułkowski, Rogoza, Żemojtel-Piotrowska, & Fatfouta, 2019).

Construction. The CNI was developed based on experimental material. Authors of the CNI invited participants to a laboratory where they asked about their thoughts and feelings related to their exceptional communal traits. As a result, two main kinds of expressions occurred: The first was related to exceptional community, like being the best friend one could imagine (the so called present-oriented factor), and the second, was based on grandiose fantasies about their exceptional role in world and being famous for exceptional deeds, such as solving world poverty (the so called future-oriented factor). The final version contains 16 items, eight per factor. However, a scale created in such a way will have a complex structure. The authors stressed its unidimensionality, however to obtain a reasonable model fit, they allowed for correlations between all items' errors (Gebauer et al., 2012). Żemojtel-Piotrowska et al. (2016) proposed a bi-factor structure to resolve the problems with the structure of the CNI, and confirmed its applicability in Polish and UK data, with scalar levels of measurement invariance across these countries.

Discussion. There is limited evidence supporting the distinctiveness of the two factors assumed by authors, i.e. the future-oriented and the present-oriented factors (Żemojtel-Piotrowska et al., 2016). Researchers typically report only a total general score. This measure of communal narcissism was based on the analysis of the grandiose self-thoughts reported by study participants. It has some advantages, as it is grounded in real-life, existing thoughts and feelings. However, some self-related thoughts could be accidentally omitted from the construct. For instance, the NPI includes aspects of self-enhancement in the agentic domain, such as the belief of exceptional agentic traits related to effectiveness, interpersonal skills related to possessing power, or physical attractiveness, but also aspects of overtly striving for power and a sense of entitlement. Therefore, the question arises, what is being measured by the CNI? It is just self-enhancement in a communal domain, or is it a more complex phenomenon, fully analogical to its agentic, NPI-based, counterpart? The answer is not easy, given the fact that communal narcissism is based on a specific form of self-presentation, in fact, an anti-narcissistic form. For instance, communal narcissists should demonstrate their modesty or exceptional prosocialness, despite the fact that they have the same narcissistic motives of self-importance, grandiosity, and dominance as their agentic counterparts. Therefore, overtly asking about entitlement or antagonistic aspects of narcissism is problematic due to communal self-presentation.

Wright et al. (2013) noted that one of the PNI vulnerable narcissism facets, namely, Self-Sacrificing Self-Enhancement (SSSE) refers to using altruistic acts to support one's inflated self-image (Pincus et al., 2009) and thus – among all of the PNI facets it might be separate from the rest of the scales due to its unique content. This raises the question of whether the CNI and SSSE are actually measuring distinct constructs? Rogoza and Fatfouta (2018) presented the first structural comparison of these two constructs, which showed negligible overlap in the structure between the scales. They both turned out to be related to the two conflicting (i.e., located on the opposite poles of a single dimension; Schwartz et al., 2012) motivational forces, specifically, self-enhancement and self-transcendence. However,

neuroticism was distinctive as it positively correlated with the SSSE and was uncorrelated with the CNI. This led Rogoza and Fatfouta (2018) to label both constructs as communal narcissism, simultaneously emphasizing their distinctiveness by defining them as pathological and normal. These results are in line with Gebauer and Sedikides (2018), who demonstrated that pathological communal narcissism is generally related to worse, while normal communal narcissism is related to higher, psychological adjustment. Summarizing the distinctiveness of the two, Gebauer and Sedikides (2018) claimed that pathological communal narcissism reflects the communal expressions of vulnerable narcissism, while normal communal narcissism reflects the communal expressions of grandiose narcissism.

COLLECTIVE NARCISSISM SCALE (GOLEC DE ZAVALA, CICHOCKA, EIDELSON, & JAYAWICKREME, 2009)

Theoretical foundation. The idea of collective narcissism was developed in the field of social and political psychology. The term collective narcissism was used by Bizumic and Duckitt (2008), as a description of a special form of group-based self-importance, however it was focused mostly on ethnocentrism. Golec de Zavala et al. (2009) based their conception of collective narcissism on the classical understanding of grandiose narcissism, assuming that narcissism should be related to an inflated and unstable self-esteem (e.g., Emmons, 1987; Morf & Rhodewalt, 2001; Raskin & Terry, 1988). For this reason, during the validation of their concept, they searched for evidence supporting their hypothesis of insecure and unstable self-esteem and aggressive reactions following (group) ego-threats associated with group narcissism.

Collective narcissism was successfully introduced into social and political psychology. It became particularly important in predicting prejudice (Golec de Zavala & Cichocka, 2012; Golec de Zavala, Cichocka, & Bilewicz, 2013; Golec de Zavala et al., 2009), especially as a reaction to a threat to positive group image (Golec de Zavala et al., 2009; Golec de Zavala, Cichocka, & Iskra-Golec, 2013) and conspiracy thinking, especially those related to a threat to in-group security (Cichocka, Golec de Zavala, Marchlewska, & Olechowski, 2015; Cichocka, Marchlewska, & Golec de Zavala, 2016). Cichocka (2017) stresses the role of insecure attachment underlying collective narcissism, contrary to high collective self-esteem, which is secure. Indeed, collective narcissism is positively associated to explicit self-esteem, and negatively related to implicit self-esteem (Golec de Zavala et al., 2009).

Measurement. The Collective Narcissism Scale (CNS; Golec de Zavala et al., 2009) is a 9-item scale developed on the basis of the NPI and the Millon Clinical Multiaxial Inventory—III (Millon, 2006). NPI items were transformed into group level items reflecting exceptionality, superiority, seeking for attention, sense of entitlement derived on the basis of the NPI, and supplemented by items reflecting sensitivity to criticism and a lack of recognition (see Golec de Zavala et al., 2009, p. 1077). As a result, the authors obtained a 23-item initial pool, which then was consulted on by experts from social, political, and clinical psychology, and with expertise in political science and conflict resolution. The initial validation sample was not too large, as it comprised 263 university students. The final version of the scale was reduced to 9 items. The authors of the CNS stressed its unidimensionality, and, similar to the authors of the CNI, they added correlations between five items to obtain reasonable model fit. Scale validation was conducted on Polish, US, and Mexican samples, which supported the cultural replicability of construct (Golec de Zavala et al., 2009).

Discussion. The CNS is a very specific scale among a broad family of narcissism measures. First of all, it was designed to explain phenomena typical for the social and political psychology fields. For this reason, the authors did not include personality psychology perspectives in the creation of the scale, and instead focused on the clinical understanding of

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Collective narcissism is a form of in-group identification

narcissism (Golec de Zavala, 2018). Adding to this challenge is that the CNS lives in a different psychological space – political rather than an individual trait measures of narcissism. Further work is needed to integrate the CNS into the current trait models of narcissism, particularly because its status as a trait is still unclear.

SUMMARY

Within the previous sections we have introduced most important measures of grandiose and vulnerable narcissism and discussed them in the context of the NSM. To summarize our suggestions, Figure 1 presents how we visualize these scales to be jointly located within the multidimensional structure of narcissistic personality.
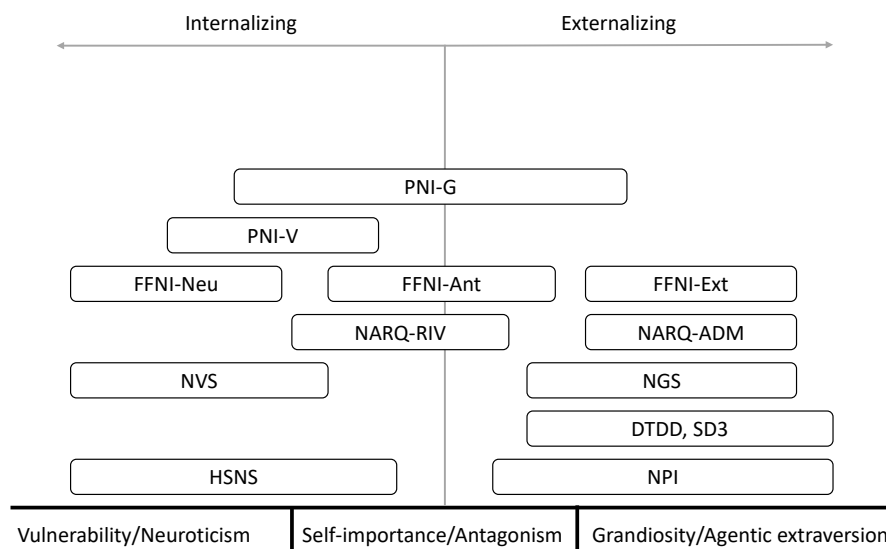
Figure 1. Different measures of narcissism within the multidimensional structure of narcissistic personality.
Note. NPI = Narcissistic Personality Inventory; HSNS = Hypersensitive Narcissism Scale; DTDD = Dark Triad Dirty Dozen; SD3 = Short Dark Triad; NGS = Narcissistic Grandiosity Scale; NVS = Narcissistic Vulnerability Scale; NARQ = Narcissistic Admiration and Rivalry Questionnaire; ADM = Admiration; RIV = Rivalry; FFNI = Five Factor Narcissism Inventory; Ext = Extraversion; Ant = Antagonism; Neu = Neuroticism; PNI = Pathological Narcissism Inventory; V = Vulnerability; G = Grandiosity. This figure is published under Creative Commons license 4.0 and is available at https://osf.io/gtkbu/.

As Figure 1 shows, we agree that the central trait of narcissism is antagonism. However, as personality pathology can be divided into internalizing and externalizing (Wright et al., 2012) so can antagonism (Weiss et al., 2019), although little is known about these dynamics and future research is needed. It is important to note that the single peripheral dimension of narcissism (i.e., vulnerability/neuroticism or grandiosity/agentic extraversion) refers neither to vulnerable or to grandiose narcissism, because it is the central dimension of self-importance/antagonism, which defines narcissism (Krizan, 2018; Miller et al., 2017; Weiss et al., 2019; Wright & Edershile, 2018). Thus, some of the existing one-dimensional measures might better capture some specific features of, for example, grandiosity/agentic extraversion (e.g., NPI, SD3) but they arguably lack satisfactory coverage of the antagonistic aspects of narcissism. If one wants to capture the entire range of antagonism, rather than simply the facets of antagonism that hang together with the more extraversion-saturated aspects of grandiose narcissism, a different or additional measure is needed. We encourage researchers

to choose the measure which will be the best suited to realize their aims and goals. Below, we present some additional information, that may be useful during the measure selection process.

Narcissistic Personality Inventory – this measure could be used to assess primarily grandiosity/agentic extraversion with some elements of externalizing antagonism (Wright & Edershile, 2018).

Hypersensitive Narcissism Inventory – the HSNS effectively measures vulnerability/neuroticism (Wright & Edershile, 2018). As some studies have demonstrated, the HSNS also measures internalizing expressions of antagonism (e.g., Miller et al., 2014). When used in conjunction with the NPI it could potentially be used to assess narcissistic personalities, however they would not provide an opportunity to disentangle the antagonistic expressions of vulnerable and grandiose narcissism.

Dark Triad Dirty Dozen and Short Dark Triad – both of these measures were inspired by the NPI, and thus they are best able to assess primarily grandiosity/agentic extraversion dimension, with limited coverage of the externalizing expressions of antagonism.

Single Item Narcissism Scale – the existing empirical evidence does not allow us to make any conclusions, however the SINS was designed as a measure of grandiosity, but it may capture vulnerability and antagonism as well. Thus, although we cannot recommend it as a primary measure, it might be useful as a screening tool, however future research is needed.

Narcissistic Grandiosity and Vulnerability Scales – both measures are good examples of short and easy to administer scales, which is advantageous in studies requiring such tools (e.g., in EMA). Although, both scales comprise some limited elements of antagonism (externalizing and internalizing respectively), they predominately assess their respective dimensions (Wright & Edershile, 2018). They may be used as replacements for the NPI and the HSNS.

Pathological Narcissism Inventory – whilst the labels of these scales may suggest that the PNI effectively measures vulnerability and grandiosity (Pincus et al., 2009), empirical evidence demonstrates that best captures the self-importance dimension of narcissism and vulnerability. More specifically, the PNI-V captures mostly narcissistic vulnerability with some elements of self-importance, while the PNI-G captures mostly self-importance with some elements of both, vulnerability and grandiosity (Wright & Edershile, 2018).

Five Factor Narcissism Inventory – is the first scale which effectively assesses a three-factor model of narcissism as well as grandiose vs. vulnerable (Krizan & Herlache, 2018; Miller et al., 2017; Wright & Edershile, 2018). Thus, using the FFNI offers more precision than the NPI or the HSNS. The FFNI is derived directly from the Five Factor Trait model, so it has theoretical roots in trait theory and structural models of personality. This can be a limitation or a strength depending on the researcher's interest.

Narcissistic Admiration and Rivalry Questionnaire – it was the first measure to disentangle the more self-promoting from the more antagonistic aspects of narcissism (Back et al., 2013). In addition, it captures vulnerability to a limited extent (Wright & Edershile, 2018). The main advantage of the NARQ is the underlying theoretical model – the NARC: The NARC dimensions can be seen either dimensionally or as a part of the process model of grandiose narcissism.

Communal Narcissism Inventory – this is currently the only measure of communal narcissism. Thus, it is recommended for research on communal narcissism, however future research might develop and propose a refined and more theoretically advanced measure.

Collective Narcissism Scale – similar to the CNI, it is also the only available measure of collective narcissism. Although it was designed on the basis of grandiose narcissism, it tends to capture more vulnerable expressions (Golec de Zavala, 2018), which emphasizes the difficulties in explaining the role of collective narcissism within narcissistic personalities. Thus, future theoretical and empirical work is needed to clearly locate collective narcissism in respect to all other narcissistic traits.

CONCLUSIONS

We now have a much more solid understanding of the measure of narcissism than we did a decade ago. There is currently wide agreement that there are two basic forms of narcissism, grandiose and vulnerable, and that good stand-alone measures exist for each. Researchers can opt for those – for example, they can use a short form of the NPI and the HNSN in a study – or they can use measures that include both, like the FFNI, or somewhat more nuanced versions of the two, like the NARQ or PNI. We hope this overview has given you some ideas about the varied benefits and trade-offs of the various measures.

Narcissism is a heterogenous construct with many different measures. The existing knowledge is extensive, allowing us to develop sophisticated theoretical models (Krizan & Heralche, 2018) which lead to an improved understanding of the functioning of narcissistic individuals. Simultaneously, in the other areas (e.g., in research on communal and collective narcissism), the knowledge and empirical evidence is limited and underrepresented. However, the ongoing research provides new insights each day and the studies devoted to the understanding of narcissism are constantly moving forward.

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Measuring children's values from around the world: Cross-cultural adaptations of the Picture-Based Value Survey for Children (PBVS-C)

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ABSTRACT

The Picture-Based Value Survey for Children (PBVS-C; Döring et al., 2010) assesses children's values through self-report and thereby depicts Schwartz's theory of universal human values at an early age (approximately six to eleven years). Recently, the original German version has been adapted for application in Poland, Bulgaria, the Ukraine, France, Italy, Switzerland, the UK, New Zealand, Australia, the USA, Brazil, Turkey, Israel, and Estonia, and it is currently adapted for application in Ireland, Russia, and Portugal. In this manuscript, we accompany the PBVS-C on its journey around the world and systematically explore culture-specifics in the adaptation process with a particular focus on the meaning of the value pictures, as the PBVS-C's core elements. Integrating findings from these adaptations of the PBVS-C, we aim to share best practice and draw a roadmap for future adaptations in other cultures. This article further serves as a resource to locate existing studies with the PBVS-C.

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INTRODUCTION

Human values have been extensively researched in psychology (and other disciplines such as sociology, anthropology, and philosophy), where the most researched theory of personal values was developed by Schwartz (1992). Schwartz's theory was confirmed in hundreds of studies in every inhabited continent (i.e., except for Antarctica), in over 200 samples from more than 70 cultures (see Sagiv & Roccas, 2017). Findings showed that human values are organized alongside a motivational continuum on a circle (see Figure 1). Specifically, Schwartz (1992) found that single values that exist around the world (e.g., tolerance, following the rules, independent thought, leadership) can be subsumed under the heading of ten basic values: universalism, benevolence, tradition, conformity, security, power, achievement, hedonism, stimulation, and self-direction. Pursuing each two of these basic values can be either motivationally compatible or potentially trigger a conflict. For example, striving for stimulation and self-direction – both entailing an openness to change – is motivationally compatible. Both are hence placed next to each other in the circle. However, this may be incompatible with striving for tradition, conformity, and security, all of which entail a motivation to preserve the status quo. Therefore, these three basic values are placed at the opposite side of the circle (see Figure 1). The closer each two values are on the circle, the more compatible they are in terms of their underlying motivation, and the further apart each two values are on the circle, the more incompatible and potentially conflicting they are in terms of their underlying motivation. Schwartz (1992) further grouped the ten basic values into four higher-order values (see Figure 1): 1) Self-Transcendence, which comprises universalism and benevolence, 2) Conservation, which comprises tradition, conformity, and security, 3) Self-Enhancement, which comprises power and achievement, and 4) Openness to change, which comprises stimulation, self-direction, and in most studies also hedonism.

Values tend to be structured alongside the circle within persons (Borg, Bardi, & Schwartz, 2015), and they also tend to change alongside the circle (Bardi & Goodwin, 2011). If for example values of benevolence become more important to a person, the neighboring values of universalism tend to become more important as well, and the values at the opposite side of the circle, power and achievement, tend to become less important. Schwartz's model thereby lends itself to research developmental dynamics of stability and change over time and with age, after significant life events and experiences (e.g., Döring & Cieciuch, 2018; Döring, Daniel, & Knafo-Noam, 2016). However, this type of research only started recently.

For a long time, research primarily focused on values of adults and to a smaller degree values of adolescents, possibly because it was thought that children cannot report on their values. This changed with the development of the first self-report values instrument for children: The Picture-Based Value Survey for Children (PBVS-C; Döring, Blauensteiner, Aryus, Drögekamp, & Bilsky, 2010). Studies with the PBVS-C have revealed that children's values are structured as clearly as adults and alongside the Schwartz (1992) circular model, that children's values direct their behavior, that children's values have a genetic component, but are also affected by social contexts and significant life events, and many more. The originally German PBVS-C has since been adapted for application in fourteen more countries: Poland, Bulgaria, the Ukraine, France, Italy, Switzerland, the UK, New Zealand, Australia, the USA, Brazil, Turkey, Israel, and Estonia, and more adaptations are ongoing for Portugal, Ireland, and Russia.
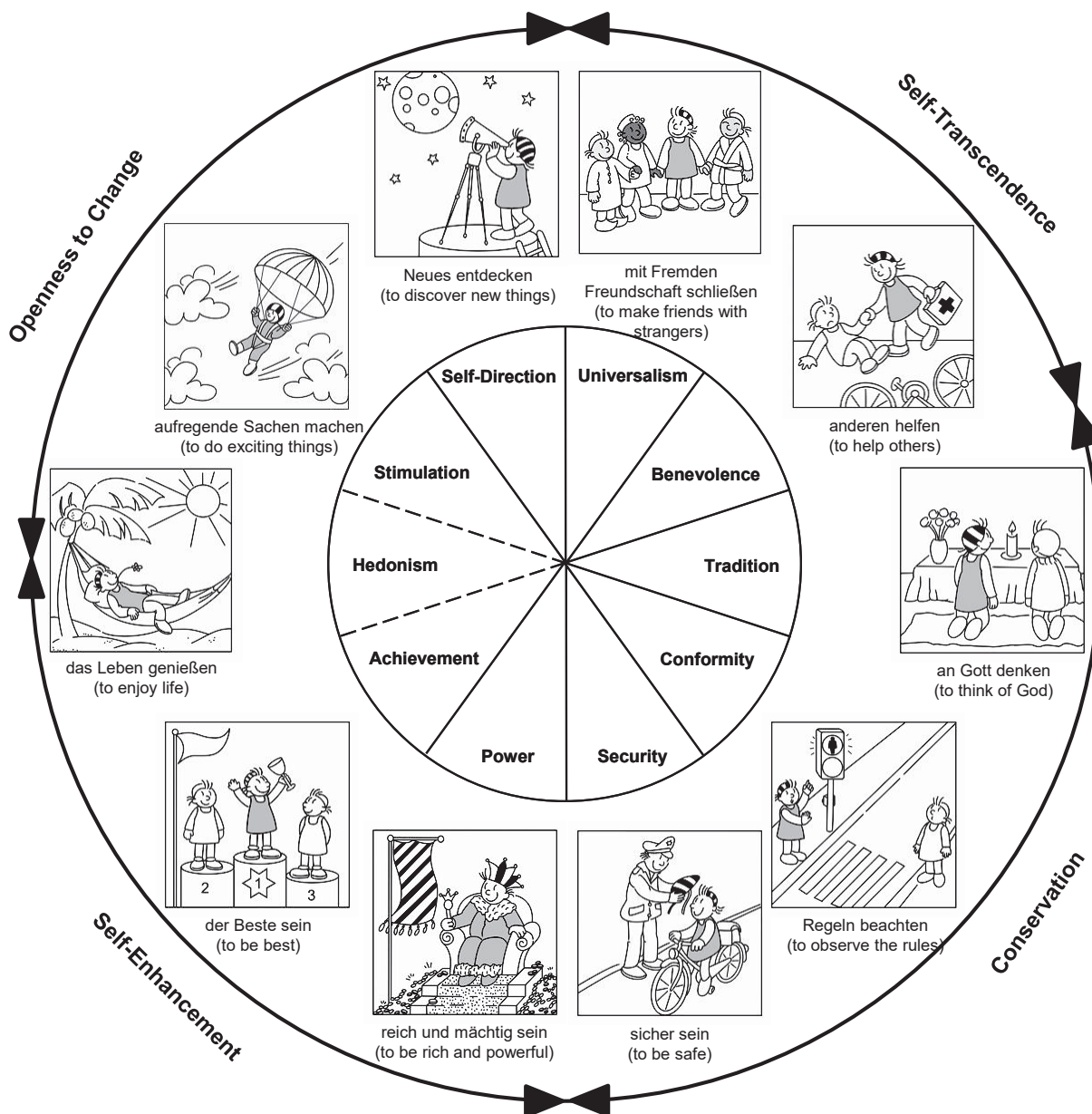
Figure 1. Schwartz's (1992) model of universal human values and its representation in the PBVS-C (sample items).
© The pictures were drawn by Andrea Blauensteiner. The ideas for the pictures were developed by Anna K. Döring.

This manuscript outlines the adaptation process, illustrates key steps of the adaptation process, and provides a roadmap for future adaptations.

THE PICTURE-BASED VALUE SURVEY FOR CHILDREN (PBVS-C)

As the name suggests, the PBVS-C uses pictorial items. Pictures of human values surround children in their everyday lives; in children's books, in movies, on television, and in school, to name just a few examples. Building on pictures as carriers of value-related meaning, the PBVS-C was developed. The PBVS-C provides access to values at an early (i.e.

elementary-school) age and thus has opened brand new options for research. For the very first time, it was possible to study value development within the framework of Schwartz's (1992) model "through the eyes of the child" (cf. La Greca, 1990).

In the PBVS-C, each of Schwartz's (1992) value types – universalism, benevolence, tradition, conformity, security, power, achievement, hedonism, stimulation, self-direction – is depicted in two pictures (see sample items in Figure 1). There are hence twenty pictures in total. In each picture, a leading character is performing a value-relevant action. In this respect, the PBVS-C takes into account children's concrete thinking, which is tightly connected with concrete actions. Furthermore, the PBVS-C mirrors the circular structure of Schwartz's model, which is rooted in the central motivational goal underlying each value types and its potential compatibilities and conflicts with the central motivational goals underlying the other value types. For this purpose, each picture in the PBVS-C is accompanied by a brief, rather abstract caption, which is intended to direct children's focus to the relevant motivational goal (see Figure 1). An introduction to the values theme is provided, and then children are requested to rank the twenty pictorial items according to what is important to them in their lives. In this respect, the PBVS-C explicitly builds on Schwartz's definition of values as desirable, transsituational goals, varying in importance, that serve as guiding principles in people's lives. The PBVS-C employs a Q-sort response format, wherein children choose two pictures that are *very important*, four pictures that are *important*, eight pictures of mean importance, four pictures that are *not important*, and two pictures that are *not at all important*. Data collected with the original German version of the PBVS-C yielded highly differentiated value structures in elementary-school age, which closely resembled Schwartz's prototypical model (see Figure 1, Table 1 gives an overview of studies with the original German version). This extremely surprising finding triggered questions about children's values in a cross-cultural context. Thus, adaptations for other countries were needed.

Table 1. Overview of studies that have employed the original German version of the PBVS-C

Reference	*N*	Age
Bilsky et al. (2013)	515	8–12 years
Cieciuch, Döring, & Harsimczuk (2013)	119	10–11 years
Döring (2008)	575	6–11 years
Döring, Blauensteiner, Aryus, Drögekamp, & Bilsky (2010)	421	8–12 years
Döring, Kärtner, & Bilsky (2018)	127	6–11 years
Döring, Makarova, Herzog, & Bardi (2017)	157	6–11 years
Döring et al. (2015)	1,167	7–11 years

ADAPTATION OF THE PBVS-C FOR APPLICATION IN OTHER COUNTRIES

The adaptation of the PBVS-C follows established procedures in cross-cultural research (e.g., Brislin, 1970): The pictures are adapted, the wording is adapted, and the validity of the adapted version is investigated (see Figure 2). These steps involve both values experts and children. The ultimate goal of the adaptation is to ensure values are measured in the same way across countries.
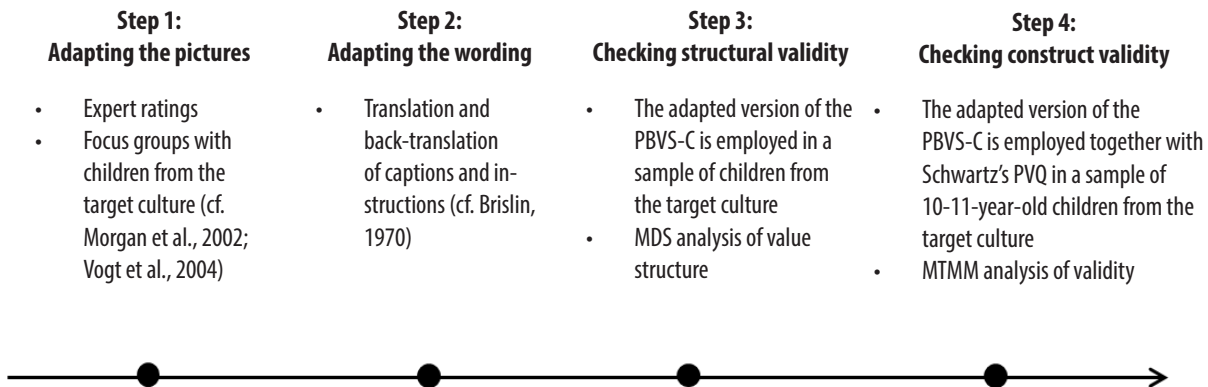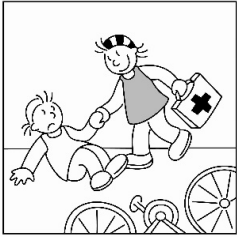
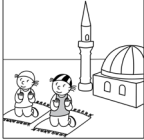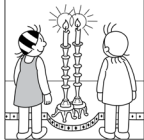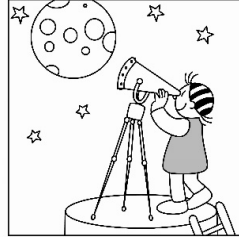| Step 1: Adapting the pictures	Step 2: Adapting the wording	Step 3: Checking structural validity	Step 4: Checking construct validity
• Expert ratings • Focus groups with children from the target culture (cf. Morgan et al., 2002; Vogt et al., 2004)	• Translation and back-translation of captions and instructions (cf. Brislin, 1970)	• The adapted version of the PBVS-C is employed in a sample of children from the target culture • MDS analysis of value structure	• The adapted version of the PBVS-C is employed together with Schwartz's PVQ in a sample of 10-11-year-old children from the target culture • MTMM analysis of validity

Figure 2. Roadmap for the adaptation of the PBVS-C.

Pictures of human values are the PBVS-C's core elements, and therefore the first step of the adaptation addressed the pictures' suitability for the target culture (see Figure 2). The PBVS-C's original pictures were inspired by drawings from all around the world and were designed as universal as possible. Still, pictures as rather concrete depictions of value scenes necessarily portray culture-specific objects, sceneries, and actions. In the original German version, priority was given to typical European aspects. The central question at the beginning of each adaptation process for one specific culture was: Would the pictures need to be changed? As presented in Figure 3, the answer to this question heavily depended (1) on the value-relevant aspect that was depicted in each picture, and (2) on the cultural context involved. For example, the value-relevant aspect portrayed in the picture Benevolence 1 (to help others) is rather universal. In order to adjust the picture to the cultures involved so far, changing a single element – the cross on the first-aid kit into a Star of David (Israel) and a crescent (Turkey) – was sufficient. In contrast, other value-relevant aspects call for a culture-specific picture. For example, religion is a central aspect of tradition in terms of Schwartz's model and is thus incorporated in the PBVS-C. In line with the prevailing religious affiliation of the children studied so far, we developed three pictures in addition to the original German picture Tradition 1 (Christian, see Figure 3): An Orthodox version (employed in Bulgaria and the Ukraine), a Jewish version (employed in Israel), and a Muslim version (employed in Turkey). The necessity for these changes was immediately raised by adult researchers from the respective culture. There were also pictures, such as picture Self-Direction 1 for example (see Figure 3) that did not need any change in any of the completed adaptations.

STEP 1:
Adapting the pictures

a) Adapting single elements Item Benevolence 1	b) Adapting the scene Item Tradition 1	b) No adaptations of the picture required Item Self-Direction 1

to help others

to think of God

to discover new things

anderen helfen (original German)
pomagać innym (Polish)
aiutare gli altri (Italian)
aider les autres (French)
to help others (British)
to help others (US-American)
to help others (New Zealandi)
to help others (Australian)
Да помагам на другите (Bulgarian)
Помогать другим (Russian caption for the Ukraine)
ajudar os outros (Brazilian)

an Gott denken (original German)
myśleć o Bogu (Polish)
pensare a dio (Italian)
practiquer une religion (French)
to think of God (British)
to think of God (US-American)
to think of God (New Zealand)
to think of God (Australian)
pensar em Deus (Brazilian)

Neuese entdecken German)
odkrywać coś nowego (Polish)
scoprire cose nuove (Italian)
découvrir de nouvelles choses (French)
to discover new things (British)
to discover new things (US-American)
to discover new things (New Zealand)
to discover new things (Australian)
Да откривам нови неща (Bulgaria)
Делать новые открытия (Russian caption for the Ukraine)
fazer descobertas (Brazilian)
למלל דבל דברים חדשים (Israeli)
yeni şeyler keşfetmek (Turkish)

לעזור לאחרים (Israeli)

başkalarına yardım etmek (Turkish)

להתפתל מיהולאל (Israeli)

ו'Allah düşünmek (Turkish)

Да мисля за Бог (Bulgaria)
Думать о боге (Russian caption for the Ukraine)

Figure 3. The different versions of the pictures (top: original, bottom: adaptations) and their captions. © The pictures were drawn by Andrea Blauensteiner. The ideas for the pictures were developed by Anna K. Döring.

For the adaptation of the pictures, a specific source of information seemed particularly relevant to us: As suggested by many (e.g., Vogt, King, & King, 2004), we aimed to enhance each picture's content validity through consultation with the target population – i.e. children – in the respective culture. In a focus group discussion (see Morgan, Gibbs, Maxwell, & Britten, 2002), each picture was presented to a group of elementary-school aged children, and the children were asked to find answers to the following questions: "What do you see in the picture?", "What is happening?", "Why is the leading character doing this?", "What is important to the leading character?" In this way, we aimed to assess children's understanding of both the scene (i.e. the objects and persons presented and their relation to one another) and the underlying motivational goal. Additionally, children were asked to find a title for each picture; that is to condense the concrete information given to an abstract concept. Table 2 exemplarily presents findings from a focus group with Brazilian children (Rottmann, 2010) and outlines how we derived adaptations from these findings:

An adult person from the target culture who was well-acquainted with Schwartz's model, but who had never seen the original pictures, tried to reconstruct each picture's content and each picture's underlying value type, relying exclusively on children's statements, as obtained in the focus group in the target culture. If the task was solved successfully, that is if the reconstructed picture closely resembled the original and if the reconstructed value type was identical with the intended one, the picture was kept. Else, it was adapted in line with children's statements (see Table 2 for details). Table 3 gives an overview of adaptations of the PBVS-C that have been completed so far, along with references and samples researched. It shows that in most countries, the pictures from the original version could be used; in Estonia, Bulgaria, the Ukraine, and Israel between one and three pictures needed adaptation, and in Turkey and Brazil four to six pictures needed adaptation.

Table 2. Adaptation of the pictures based on consultation with children from the target culture: Exemplary findings from a focus group in Brazil (nine 6–11-year-old children from Cantanhêde, North-Eastern region)

The original picture	Brazilian children's statements: Excerpts from the transcripts of the focus group	Rating by a Brazilian adult who was well-acquainted with Schwartz's model, but had never seen the original pictures: Reconstruction of the original picture, reconstruction of the underlying value type (and confidence rating)	Need for adaptation
Benevolence 1:	I see Laila helping a girl who fell on the ground [...] She helps this person, because he/she had an accident with his/her bicycle [...] I think she acts this way, because she likes humans and doesn't want to see them like this... hurt and such things... I think she has empathy. [...] It is important that she saves the person's life.	 Benevolence (very confident)	none
Universalism 1:	Laila and the others are holding hands. They are happy. [...] This child (person at the right) wears a bathrobe. [...] I think this woman (second person from left) is a grandma. [...] She wears a pyjama, and the baby (person at the left) as well [...] I think Laila loves these people. She is a very good friend. [...] Laila and her friends.	 Benevolence (very confident)	Depicting persons who differ with respect to their appearance (color of skin, hair, physique, clothes etc.), this picture is intended to portray children from different countries. Brazilian children, however, grow up in a multi-ethnic society. Therefore they attributed differences in the characters' appearance to age ("baby", "grandma") and were wondering why some characters were wearing unusual clothes ("bathrobe", "pyjama"). In order to emphasize the different cultural and geographic roots of the children portrayed in this picture, we added a globe:

Döring A. K. (2018). Measuring children's values from around the world: Cross-cultural adaptations of the Picture-Based Value Survey for Children (PBVS-C). *Studia Psychologica: Theoria et Praxis, 18*(1), 49–58. http://dx.doi.org/10.21697sp.2018.18.1.03

The second step of the adaptation process (see Figure 2) concerns the adaptation of the picture's captions and the instruction. For this purpose, they were translated by a bilingual person from the source (German) to the target language, aiming to find child-appropriate expressions (as employed for example in children's books and in dictionaries for children). Then another bilingual person who did not know the original German instruction and captions conducted a back-translation. This procedure ensures an accurate translation which (1) preserves the original meaning and (2) provides an adaptation to the target culture (Brislin, 1970; see Figure 2 for details). The adaptation of the wording also needs to consider specifics of the society wherein research is conducted. For example, in France as a laicist state, the title of one Tradition item ("to think of God") could not be translated literally and presented to primary school children, as this implies God exists (and there is one). Instead, the title was change to "to practice a religion".

Table 3. Completed adaptations of the PBVS-C (ordered by the extent to which the pictures needed to be adapted), with reference and information about the sample researched

Degree of change of the pictures		
No change	**1–3 pictures changed**	**4–6 pictures changed**
• **Italy** Döring et al. (2015) $n = 380$, age: 7–11 years	• **Bulgaria** Döring et al. (2015) $n = 411$, age: 7–11 years	• **Turkey** Kapikiran & Gündoğan (2018) $n = 573$, age: 7–12 years
• **France** Bilsky et al. (2013) $n = 306$, age: 7–12 years	• **Ukraine** Manuscript in preparation $n = 355$, age: 5–13 years	• **Brazil** Roazzi, Döring, Gomes, Souza, & Bilsky (2011) $n = 185$, age: 6–12 years
• **Switzerland** Döring, Makarova, Herzog, & Bardi (2017) $n = 261$, age: 7–9 years	• **Estonia** Tulviste, Harro, & Tamm (2018) $n = 333$, age: 7–14 years	
• **Poland** Cieciuch, Davidov, & Algesheimer (2016) $n = 801$, age: 8–13 years Cieciuch, Döring, & Harasimczuk (2013) $n = 164$, age: 11–13 years Cieciuch, Harasimczuk, & Döring (2013) $n = 910$, age: 8–12 years Döring et al. (2015) $n = 984$, age: 7–11 years	• **Israel** Abramson, Daniel, & Knafo-Noam (2018) $n = 243$, age: 5–12 years Berson & Oreg (2016) $n \sim 20,000$, children in grades 1 and 2 Uzefovsky, Döring, & Knafo-Noam (2016) $n = 348$, 7 years	
• **UK** Manuscript under revision $n = 128$, age: 5–13 years		
• **USA** Döring et al. (2015) $n = 66$, age: 7–11 years		
• **Australia** Manuscript in preparation $n = 140$, age: 5–11 years		
• **New Zealand** Döring et al. (2015) $n = 83$, age: 7–11 years		

In the third and fourth step of the adaptation, the validity of the adapted version of the PBVS-C was examined. Step 3 speaks to the structural validity: The adapted PBVS-C version

is completed by children of elementary-school age in the target country, and the researcher investigates, if children's values are structured according to Schwartz's circular model. The technique employed is Multidimensional Scaling (see Döring et al., 2010, for details on the statistical procedure and its justification). Finally, step 4 speaks to construct validity: The researcher employs the adapted version of the PBVS-C alongside the Portrait Values Questionnaire (PVQ), an established questionnaire for adolescents and adults, in a sample of 10-11-year-old children from the target culture (who are typically able to complete the PVQ, see Döring, 2010). In a multitrait-multimethod (MTMM) approach, the researcher can then examine, if the measurement of the four higher-order values self-transcendence, conservation, self-enhancement, and openness to change correlates significantly across the two instruments, and if the four higher-order values occur as distinct constructs (see Cieciuch, Döring, & Harasimczuk, 2013 for an example).

<div align="right">STEP 3 AND 4:

Checking validity</div>

A ROADMAP FOR FUTURE ADAPTATIONS

We propose the process outlined in Figure 2 as a roadmap for future adaptations, as it builds on best practice from past studies: The first step considers whether and to what extent the pictures need adaptation and builds on input from both experts (researchers of human values) and children (as the target population). Our experience from past adaptations shows that the more different the target country is from Germany (the original version) in terms of culture and life context, the more adaptations are required. The second step focusses on the wording – picture captions and PBVS-C instructions – and it follows the established translation and back-translation procedure (Brislin, 1970). Finally, steps three and four establish the validity of the adaptation of the PBVS-C. Data are collected from a substantially large sample of children from the target country, and the researcher investigates structural and MTMM validity. As the ultimate goal of the adaptation is to ensure values are measured in the same way across countries, future research may further explore measurement invariance of the PBVS-C in data sets from children in various countries (see Cieciuch, Davidov, Vecchione, Beierlein, & Schwartz, 2014, for an investigation of measurement invariance of instruments to measure adults' values).

We are looking forward to future adaptations of the PBVS-C to enhance our understanding of children's values around the world. Interested researchers are welcome to contact the author.

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