Structural validity of the Communal Narcissism Inventory (CNI): The bifactor model☆,☆☆

Magdalena Żemojtel-Piotrowska [a,*], Anna Z. Czarna [b,c], Jarosław Piotrowski [d], Tomasz Baran [e], John Maltby [f]

[a] University of Gdańsk, ul. Bażyńskiego 8, 80-309 Gdańsk, Poland
[b] Jagiellonian University, ul. Gołębia 24, 31-007 Krakow, Poland
[c] Universität Bern, Switzerland, Fabrikstrasse 8, 3012 Bern
[d] University of Social Sciences and Humanities, ul. Gen. Tadeusza Kutrzeby 10, 60-995 Poznań, Poland
[e] University of Warsaw, Ul. Stawki 5/7, 00-183 Warszawa, Poland
[f] University of Leicester, College of Medicine, Biological Sciences, and Psychology, Henry Wellcome Building, Lancaster Road, Leicester LE1 9HN, United Kingdom

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ABSTRACT

The current report presents the factor structure analysis for the Communal Narcissism Inventory (CNI). The bifactor model assuming one general factor and two residual factors (present-focused and future-focused communal narcissism) was examined across two student samples originating from Poland (N = 831) and the UK (N = 304) and compared to one-factor and two-factor solutions. Results supported the bifactor solution for the CNI, with one strong general factor and two weaker residual factors, as well as an indicated difference in the strength of correlations with external variables (self-esteem, agentic narcissism and psychological entitlement) for present and future communal narcissism. The obtained bifactor solution showed partial scalar invariance across two national samples, suggesting full replication of findings in two different cultural contexts. The implications of the bifactor model of communal narcissism for research practice are discussed in terms of both structural equation modeling and multiple regression analyses.

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1. Introduction

Most studies on narcissism predominantly assume that narcissism is based on a grandiose self-view (Campbell & Foster, 2007; Emmons, 1984; Miller & Campbell, 2008; Morf, Horvath, & Torchetti, 2011; Raskin & Terry, 1988). The most popular tool to measure narcissism is the Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988), which captures positive self-view, sense of entitlement, and desire for power and esteem. Numerous and replicable findings on narcissism support the agency model of narcissism, assuming that grandiose self-view is based on traits referring to agentic domain (Campbell, Brunell, & Finkel, 2006).

Recently, Gebauer, Sedikides, Verplanken, and Maio (2012) proposed a communal model of narcissism, broadly defined as a grandiose self-view in the communal domain. They posit that communal narcissists have the same motives as agentic narcissists in terms of power, esteem, entitlement and grandiosity, but instead of promoting self-worth in agentic domains, communal narcissism reflects high self-perceived capacity in communal domains, such as morality, kindness, and emotional intimacy. Communal narcissism is distinct from other forms of narcissism (Gebauer et al., 2012), and genetically independent from them (Luo, Cai, Sedikides, & Song, 2014), but communal narcissism shows parallel relationships with self-esteem, entitlement, and satisfaction with life to agentic narcissism (Żemojtel-Piotrowska, Piotrowski, & Maltby, 2015). Correlations between agentic and communal narcissism are weak to moderate (Gebauer et al., 2012), but they both correlate with self-esteem, need of power, and psychological entitlement with similar strength (Gebauer et al., 2012). Their correlates with personality traits are similar, but differ with regard to agreeableness, as agentic narcissism correlates negatively to it, while communal narcissism correlates positively (Gebauer et al., 2012).

Gebauer et al. (2012) assumed a unidimensional structure of communal narcissism. However, there are premises suggesting its multidimensionality. The first one is reflected in the content of the Communal Narcissism Inventory itself, as it is comprised of items referring to the current time (e.g., *I'm an amazing listener*), and items referring to the

future (e.g., *I will bring freedom to the people*). Items referring to the present could be interpreted in terms of grandiosity, i.e., positive self-view in communal traits. Items referring to the future seem to represent a fantasy about positive influence on others, thus could be interpreted in terms of communal power or communal grandiose fantasy. We note that self-enhancement tendencies can find expression in the form of grandiose views on the present self as well as in overly optimistic unrealistic fantasies about the future (as manifested e.g., by comparative optimism, Shepperd, Carroll, Grace, & Terry, 2002). This might be particularly bold, as biased self-serving views regarding the future may undergo less scrutiny than views regarding the present. We speculate that in the communal domain such self-aggrandizing optimistic future views might be particularly difficult to scrutinize and revoke due to the fuzzy and subjective nature of accomplishments in this domain. Thus, claims regarding future accomplishments in the communal domain might become a convenient outlet for communal narcissism.

Furthermore, as there is current consensus with regard to the multi-dimensionality of narcissism in both grandiose and vulnerable forms (see Miller et al., 2015 for review) and because communal narcissism is supposed to parallel agentic grandiose narcissism, we find it highly plausible that communal narcissism too is a multidimensional phenomenon. Introducing the distinction between the present and the future grandiose self-views might advance understanding of some of the underlying psychological processes associated with communal narcissism. For example, the distinction between present behavior and future intentions might be important in terms of understanding conscious aspects of communal narcissism, particularly in terms of psychological volition (e.g., Frith, 2013). This possible distinction could be considered via two techniques: bifactor model analysis (Gibbons & Hedeker, 1992) and discriminant validity (Campbell & Fiske, 1959).

First, bifactor models encompass the idea of a single common construct (e.g., general communal narcissism), while also recognizing the multidimensionality of the concepts (e.g., present and future communal narcissism). Analysis of the bifactor model also allows for identification of a general factor and residualized primary factors and for comparison of their relative strengths in overall variance, which is impossible in classical hierarchical models (Chen, Hayes, Carver, Laurenceau, & Zhang, 2012; Reise, Scheines, Widaman, & Haviland, 2013).

Second, we consider the discriminatory validity of the obtained factor solution, which examines whether the distinct concepts in the proposed measurement are indeed distinct with regard to correlates (Campbell & Fiske, 1959). Present-focused communal self-thoughts seem to be related more to very high self-esteem and general beliefs about own moral superiority in comparison to social surroundings (such as being the best friend or an amazing listener). Future-focused communal self-thoughts are related more to grandiose fantasies about extraordinary large-scale world-changing accomplishments (such as bringing peace, freedom, and justice to humankind). Most future self-thoughts are related to one's unusual future status in the world and beliefs in one's capacity to influence others, and they seem to be related to desire for fame and worldwide recognition. Present-focused self-thoughts express self-righteousness and complacency, beliefs in own fundamental exceptionality, and general moral superiority. Both of these kinds of thoughts, though distinct, seem to stem from a common root represented by the general factor of communal narcissism (see Gebauer et al., 2012).

Therefore, consideration of the proposed bifactor solution will help clarify and provide a context to a debate about how to conceptualize communal narcissism. The objective of the current study is to extend previous research by examining the structural validity of CNI through comparison of several statistical models and their replicability across two different linguistic versions (i.e., English and Polish). After examining the possibility of identifying two residual factors among CNI, we also investigate whether present or future communal grandiose self-

thoughts correlate differently to self-esteem, psychological entitlement, and agentic narcissism. We posit that both present-focused and future-focused communal narcissism should be positively related to higher self-esteem, but future narcissism will be related more strongly to agentic narcissism than its present counterpart as it manifests grandiose fantasy about exceptional influence on others rather than overestimation of own current communal traits.

2. Methods

2.1. Samples and procedure

Two samples were used in the current study. Sample 1 consisted of 304 undergraduate students (73.7% female, mean age = 19.98 years, $SD = 3.34$, range 17–46 years) from England. Sample 2 consisted of 501 undergraduate students and 330 adolescents and young adults from Poland recruited online (57% female, mean age = 21.43 years, $SD = 2.72$, range 16–47 years).

Participation in the study was anonymous and voluntary. Students from England and some of the participants from Poland were recruited to the study online. The rest participated offline. Scales were administered in small groups (15–20 people) during their classes. The students recruited offline were rewarded for participation with credit points.

2.2. Instruments

The Communal Narcissism Inventory (CNI; Gebauer et al., 2012). This scale serves as a measure of communal narcissism, defined as grandiose self-thoughts in the communal domain (e.g., *I'm an amazing listener*; *I will bring freedom to the people*). The scale consists of 16 items: eight are related to the present, seven refer to the future and one is conditional, referring to the present or the future. The response scale ranges from 1 — *strongly disagree* to 7 — *strongly agree*. The scale has adequate reliability (Cronbach's alphas ranged from .86 to .94, Gebauer et al., 2012) and some preliminary validity (Gebauer et al., 2012). Polish versions of the scale were obtained through the process of translation and independent back translation conducted by bilingual psychologists and native speakers.

Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988, Polish adaptation, Bazińska & Drat-Ruszczak, 2000). The Narcissistic Personality Inventory is the best-recognized scale measuring the agentic form of narcissism. The scale consists of 40 items (34 in the validated Polish version), referring to grandiose self-thoughts, need for power, and sense of entitlement (e.g., *I'm a born leader*; *I like to show off my body*). In the UK, participants chose between pairs of statements, one of which was an indicator of narcissism. In Poland, participants responded to each item using scales that ranged from 1 = *it's not me* to 5 = *it's me* (Bazińska & Drat-Ruszczak, 2000). Cronbach's alphas of the NPI was .94 in the Polish sample and .84 in the British.

Psychological Entitlement Scale (PES; Campbell et al., 2004, Polish adaptation Żemojtel-Piotrowska, Piotrowski, & Baran, 2015). The PES serves as a measure of psychological entitlement, defined as a pervasive sense that an individual deserves more than others and is entitled to more than them. The scale consists of 9 statements (e.g., *I deserve the best*), one of which is reverse-scored. Answer categories ranged from 1 — *strongly disagree* to 7 — *strongly agree*. Cronbach's alphas coefficients in the current study were .87 in the Polish samples and .86 in the British.

Self-esteem Scale (Rosenberg, 1965, Polish adaptation Łaguna, Lachowicz-Tabaczek & Dzwonkowska, 2007). The scale serves as a measure of general positive self-evaluation. Five items are positively scored and five reverse-scored. Rating scores ranged from 1 — *strongly disagree* to 5 — *strongly agree*. Cronbach's alphas were .91 in the Polish samples and in the British.