

RESEARCH ARTICLE



The Opposition to Inclusive Education: Authoritarianism and Social Darwinism and Their Impact on Exclusive Attitudes in Education

Tom Jannick Selisko^{1,*} and Marius Dilling^{2,†}

¹Department of Education, Saarland University, Germany

²Else-Frenkel-Brunswick-Institute, University of Leipzig, Germany

Abstract: This article explores the relationship between authoritarianism, Social Darwinism, and exclusivist attitudes toward individuals with disabilities in the context of inclusive education. Using the method of structural equation modeling, we test whether authoritarianism and Social Darwinism pose a barrier to inclusive education (understood as segregated placement, transmissive learning and teaching beliefs, and a medical model of disability). The sample consists of $N = 215$ student teachers and psychology students from a southwestern German university. The hypothesis that Social Darwinism plays a mediating role between authoritarian attitudes and exclusivist attitudes toward inclusion was tested for the first time. Findings confirm the assumed predictive relationship between right-wing authoritarianism and opposition to inclusive education. While right-wing authoritarianism and Social Darwinism are indeed significantly related, we do not observe, however, a significant relationship between Social Darwinism and exclusionary attitudes—a finding we discuss particularly in light of our sample. The results indicate that the opposition to inclusive education is based on a coherent attitude that is in compliance with authoritarianism. Practical implications are discussed.

Keywords: disability, inclusion, authoritarianism, Social Darwinism, attitudes

1. Introduction

Since the *Authoritarian Personality* [1], authoritarianism has been considered a central predictor of prejudice. The researchers of this classic study perceived authoritarianism as a pivotal cause of the devaluation and aggression toward out-groups, which are perceived as deviant from the social norm—but above all as “weak.” While previous research has already been able to highlight that modern operationalizations like Altemeyer’s scale on right-wing authoritarianism (RWA) [2] are related to prejudice [3], discrimination against people with disabilities [4], opposition to rights for persons with physical and intellectual disabilities [5], and opposition toward inclusion by preservice teachers [6], we more specifically assume an impact on attitudes toward inclusive education as it is postulated by the UN Convention on the Rights of Persons with Disabilities [7]. The attitudes of (student) teachers toward inclusive education is a widely researched field [8–10]. The possibility that certain far-right attitudes that distinguish between valuable and unvaluable lives, such as Social Darwinism [3], may play a mediating role between RWA and attitudes toward inclusive education has not, to our knowledge, been explored in detail before.

To this end, we first outline the state of the research and our theoretical considerations: in the following section, we first set out our understanding of exclusive attitudes (exclusive placement, transmissive beliefs in learning and teaching, and a medical model of disability). We then discuss the relationship between RWA and exclusive attitudes, considering in particular the possibility of a mediating role of Social Darwinism. We then describe our data and methodological approach—structural equation modeling—followed by a presentation of the results of our analyses. Finally, we discuss possible directions for future research as well as limitations and implications for future efforts toward inclusion.

2. Theoretical Framework

2.1. Exclusive and inclusive attitudes toward education

Inclusion is still a much-debated topic in society generally and education specifically. Since the UN Convention on the Rights of Persons with Disabilities [7], an increasing number of articles regarding inclusive education have been published [11]. Many of these articles are principally concerned with the definition of inclusive education [12–16]. Depending on context (region, political background, perspective on inclusion, implications associated with inclusive education), definitions differ considerably [17–19].

*Corresponding author: Tom Jannick Selisko, Department of Education, Saarland University, Germany. Email: tom.selisko@uni-saarland.de

†Co-first author

Two streams can be traced within the scientific discourse on inclusive education: first, a predominantly technical-functional approach, which is concerned with the joint education of children with and without disabilities (e.g., support for children with special needs, social, emotional, educational, and pedagogical outcomes in joined settings), and second, a (radical) constructivist approach, which is mainly concerned with the reduction of barriers and provision of inclusive environments and methods.

Widely recognized in terms of a constructivist approach is the Index for Inclusion by Booth and Ainscow [20]. The list of aspects of what inclusion in education involves within the Index for Inclusion is explicitly not absolute, and an integral part is stated to be permanent change and the “unending process of increasing learning and participation for all students” [20]. Further aspects are the reduction of *barriers*, the perception of heterogeneity as a resource, the overall improvement of school, and the recognition of inclusive education as one aspect of inclusion in society [20].

From a functionalist standpoint, these indicators are not suitable for studying the progress of inclusive education. Meta-analyses and reviews on inclusive education therefore do not apply detailed definitions and limit their research to the common ground of some sort of joint education of children with and without disabilities or special educational needs [21–24].

These contradicting definitions, as well as their application, led to the synthesis of definitions by Göransson and Nilholm [25], who inductively developed categories from a literature review and concluded a hierarchical relationship between qualitatively different categories of definitions. These definitions follow the same rationale as previous categorizations in narrow (category A: placement and category B: meeting the needs of children with disabilities) and wide (category C: meeting the needs of all pupils and D: creation of inclusive communities) [26, 27].

Contrary to most contributions, which are concerned with inclusive education, we are specifically concerned with attitudes and beliefs that hinder inclusive education. We draw from the theoretical framework by Selisko et al. [28], which states three central perspectives regarding the education of children with and without disabilities (see Figure 1): the model of disability, attitudes toward placement, and beliefs regarding learning and teaching.

To the left of the Objectivity-Rubicon, the education of children with disabilities is seen as functional. The aspects within the triads have a reciprocal effect. For example, regarding the exclusion triad (left), the medical model lies the basis to identify children with disabilities, which allows for grouping children, which is necessary to provide the adequate stimulus for learning. On the other hand, it is evident that behaviorist/transmissive beliefs rely on learners as homogeneous as possible, which calls for the grouping (exclusion) of children who need to be identified [11].

Although cognitivist beliefs attribute an active part to the learner, the objectivity of learning outcomes is upheld. After consideration of the most favorable environment, successful or unsuccessful learning is ascribed to the learner. For example, a lack of participation can be attributed to a person with disability within a relational model. Participation in regular learning is conditionally attached to the objective of learning, both of which are determined by the environment.

Only to the right of the Objectivity-Rubicon, there is a coherent argument for full inclusion. (Radical) Constructivist learning beliefs determine learning as an individual process and therefore have subjective outcomes. The social model of disability ascribes any barrier to participation in the environment and dissolves the causal relationship with impairments—which in turn makes grouping impossible.

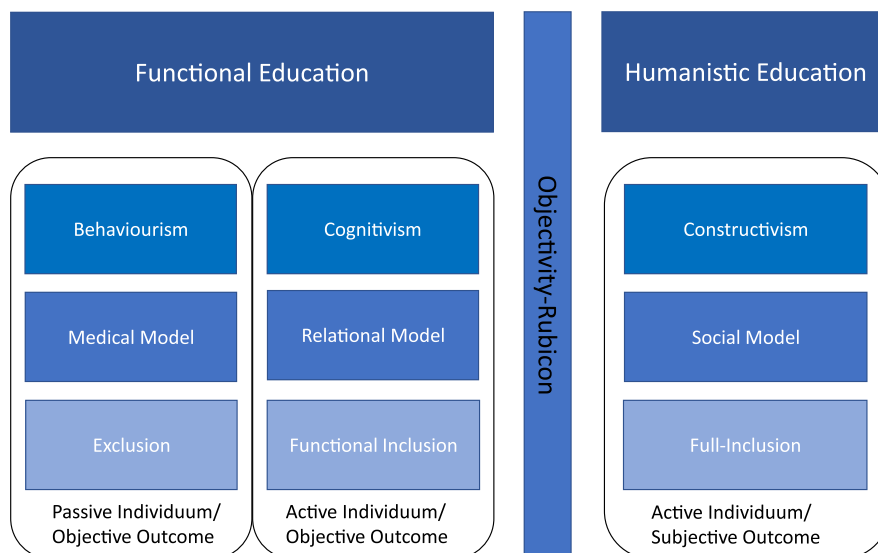
2.1.1. Exclusive paradigm

Within the discourse on inclusive education, we take a unique approach by looking at aspects that hinder more joint education. To understand the reasoning behind the continued exclusion of children with disabilities into special education institutions, we combine aspects of the exclusion triad of the framework by Selisko et al. [28] and the constructs of authoritarianism and Social Darwinism. The relationship can potentially inform future efforts for inclusion.

2.1.2. Medical model of disability

Inclusive education is inherently informed by the education of children with disabilities, although the discourse has advanced considerably in recent years to include all children. Disability is

Figure 1
Framework of inclusive education



generally considered a legitimate cause for segregation [29]. How the education of children with disabilities can be organized depends on the model of disability. A medical model states an objective deviation from the norm [30]. Under the premise that everybody is entitled to adequate education, this deviation can be used as a legitimate cause for segregation. Furthermore, a medical model is the precondition to categorization because it postulates an objective reference in terms of the form and severity of disability [31]. It is also a solely individualizing model, which locates the matter of concern within the person, without any regard for environmental factors of disability.

2.1.3. Transmissive beliefs

In conjunction with the conviction that the best outcomes can be realized with a group as homogeneous as possible, a medical model of disability contradicts the call for joint education [32, 33]. Early endeavors in special education targeted the general exclusion from education altogether and proved the educability of persons with various impairments [34]. This led to the establishment of special education institutions without changing the medical perception of disability. The segregation from general education was later criticized by concepts of stigma and normalization [35, 36]. Within a classroom with a teacher that views learning as mainly transmissive, the increase in heterogeneity that goes along with inclusion is necessarily regarded as an obstructive factor [37].

2.1.4. Teachers' attitudes toward inclusive education

Attitudes have initially been defined as "a mental and neural state of readiness, organized through experience, exerting a directive and dynamic influence upon the individual's response to all objects and situations with which it is related" [38]. Whether attitudes are a stable construct or in fact depend on various contextual factors is still a much-debated issue [39].

Research on attitudes toward inclusive education has grown significantly over the years, yet findings remain sparse and occasionally contradictory [40–42]. Notably, teachers' attitudes to inclusive education are frequently highlighted as a crucial factor in promoting its implementation [43].

Aspects of the framework of inclusive education are considered beliefs, which together form an attitude [44]. Beliefs are conceptualized to represent "[...] an individual's representation of reality or what an individual holds to be true, whether or not there is evidence to support that representation. Beliefs have enough personal validity and credibility to guide behavior and thought" [45]. Therefore, the present study considers the vertical triads of the framework of inclusive education as separate entities that can and should be evaluated separately.

It is crucial for the discourse to differentiate attitudes toward inclusion and attitudes toward exclusion. Although they appear to be mutually exclusive, recent studies indicate that the assessment of inclusive education is more complex [28]. Based on the work by Eagly and Chaiken [46], we focus on the cognitive aspects of attitude in terms of the medical model of disability and transmissive beliefs, as well as the affective aspects in terms of the evaluation of exclusive placement.

The present study contributes to the understanding of attitudes toward inclusive education by including central beliefs about disability (the medical model of disability) and learning (transmissive beliefs). Previous studies concerned with the cognitive dimension of attitudes toward inclusive education predominantly examined teaching experience and the degree or type of disability [24, 47]. By application of the medical model, we take a more general approach

to the reasoning for exclusion. Within the context of inclusive education, attitudes may differ regarding the inclusion of children with physical compared to cognitive impairments. The medical model suggests a fixed relationship between an objectively measurable impairment and the potential for participation and learning. Making this connection between impairment and disability states a causal relationship, which inhibits the consideration of environmental factors. An aspect of inclusive education is reflected within the discourse of labeling and stereotypes of certain disabilities and special educational needs [48].

Attitudes toward inclusive education of teachers and other professionals in the field are not solely informed by their stance on pro or anti-inclusive education. Through the application of the framework of inclusive education by Selisko et al. [11], the model of disability and learning theory appear as core principles in determining the feasibility and aspiration of inclusion. It is evident, though, that attitudes regarding inclusive education are not only informed by rational assessments of the situation but necessarily by ideological convictions and their underlying (authoritarian) dispositions.

2.2. Authoritarianism, Social Darwinism, and the deviation from the norm

Authoritarianism is still considered central to understanding right-wing extremism and group-based prejudice, especially in Germany [3]. The concept goes back to Adorno et al. [1], who, at the end of World War II, asked how the rise of fascism and anti-Semitism was possible. They assumed the irrationality of ethnocentric attitudes and described authoritarianism as a socially shaped disposition representing, in the words of psychoanalysis, ego weakness compensated for by identification with authority and aggressive devaluation, especially of those fantasized as "weak" or "deviant." As a causal factor, the authors assumed authoritarian parenting styles (in the context of their studies, this was primarily understood to mean the 19th century patriarchal father dominating his own family), which lead to the fact that the children could not give free rein to their aggression toward their parents out of fear and therefore need substitute objects. From the perspective of classic and modern authoritarianism research, minorities who deviate from the social norm, such as people with disabilities, can take on this role for people with authoritarian dispositions [49, 50].

Their California F(ascism) Scale was an influential, albeit highly criticized [51] measure that captured authoritarianism in originally nine psychoanalytically based facets. In an attempt to improve the measurability of authoritarianism, Altemeyer [2] removed the concept of its psychoanalytic background and conceptualized it using only three dimensions: *authoritarian submissiveness*, which, as defined by Adorno et al. [1], is not a realistic or balanced respect toward authority but an individual's tendency and emotional need to submit and uncritically follow the lead of a strong ruler; *authoritarian aggression*, which captures the extent to which an individual seeks to punish (socially) deviant behavior, and *conventionalism*, which measures the willingness to abide by the established rules of conduct and maintain the status quo [2, 52, 53].

2.2.1. Authoritarianism, prejudice against people with disabilities, and inclusive attitudes

Duckitt's [54] dual-process motivational model (DPM) conceptualizes Altemeyer's RWA as one of two complementary worldviews. From the perspective of social dominance orientation (SDO) [55], the world appears as a "competitive-jungle" characterized by striving for dominance and superiority. The world from the

authoritarian perspective, on the other hand, is perceived as dangerous and threatening [54]. In another study, Duckitt and Sibley [56] as well as Duckitt [57] derive that different motivations for SDO and RWA are associated with different patterns of devaluation of out-groups. Within the framework of DPM, authoritarianism tends to be associated with the devaluation of “dangerous” and “threatening” groups, whereas SDO should be empirically strongly associated with “derogated”—that is, groups of people toward whom dominance must be maintained—such as people with disabilities. Both SDO and RWA are associated with groups that are perceived as “dissident.” Brandes and Crowson [6] come to similar conclusions: while both SDO and RWA were positively correlated with prejudice against students with disabilities, SDO seemed to be the stronger predictor within their regression models, and the effect of SDO was partially mediated by these prejudices, which also led to a rejection of inclusion. Additionally, Asbrock and Kauff [58] are able to demonstrate that authoritarian aggression in particular plays a central role in the evaluation of (ethnic) diversity, as diversity represents a nonconformist threat to group conformity. This points to the rejection of pro-diversity beliefs, but we would like to add that it is possibly also related to a relationship between authoritarianism and the rejection of inclusive attitudes toward people with disabilities.

However, consistent with the assumptions of the DPM, Crowson et al.’s [5] findings show that when it comes to changing the social order to be more inclusive and empowering for people with physical and intellectual disabilities, authoritarianism does have a strong influence: they come to the conclusion that changing the social order and the status quo is a “threat” that authoritarian-minded individuals reject. Slavchova [4] supports this assumption: she was able to show that both RWA and SDO act as inclusion-inhibiting factors—they have significant influence on personnel decisions in favor of applicants without disabilities but with equal qualifications.

Thus, the literature suggests that authoritarian-minded individuals should favor adherence to the status quo with respect to the school system, for example, segregation of students with and without disabilities as the medical model of disabilities and transmissive beliefs would suggest [11]. Beyond mere conventionalism and the associated preservation of the status quo, however, this connection is already made plausible by classic studies on authoritarianism. People with disabilities may be perceived as socially deviant by authoritarian individuals, which is why they lend themselves as a possible substitute object for authoritarian aggression.

H1: The higher the authoritarian attitudes, the more pronounced the exclusivist attitudes toward people with disabilities.

2.2.2. Authoritarianism and right-wing extremist attitudes

Since 2002, the Leipzig Studies on Authoritarianism (most recently) [59] have traced the close empirical relationship between far-right attitudes [60] and authoritarianism in Germany. One dimension in particular of this six-dimensional attitudinal construct is expected to be closely related to the devaluation of people with disabilities as well as—this is what we want to test here—opposition to the inclusion of people with disabilities: that is *Social Darwinism*. It is the view of society in biologicistic categories—a distinction is made between “valuable” and “unvaluable” life—which goes hand in hand with the idea that the supposedly “strongest” must prevail so that the “species” can survive. While the devaluation of people with disabilities is not the focus of this paper, we suspect that such an attitude is, as stated above, also associated with the tendency to exclude people with disabilities from society. For this reason, we hypothesize a partial mediation of the effect of authoritarianism via Social Darwinism on exclusive attitudes toward people with disabilities.

H2: The higher the authoritarian attitudes, the more pronounced the Social Darwinist attitudes.

H3: The higher the Social Darwinist attitudes, the more pronounced the exclusivist attitudes toward people with disabilities.

H4: The effect of authoritarianism on exclusive attitudes toward people with disabilities is partially mediated by Social Darwinism.

3. Sample and Methods

3.1. Sample

We recruited participants at Saarland University, Germany, from December 2022 to February 2023. Due to the necessary knowledge to assess learning theory, the targeted participants were student teachers and psychology students who were awarded study credentials for participation. Information regarding the study was distributed in classes, lectures, and the local learning management system. The recruiting process resulted in a convenient sample. The initial sample consisted of $N = 215$ participants, of whom ($n =$) 24 showed missing values and were therefore excluded. The final sample consisted of $N = 191$ students, ($n =$) 132 teacher students, and ($n =$) 59 psychology students. The mean age is $M = 21.7$ ($SD = 3.7$), with ($n =$) 159 females, ($n =$) 42 males, and ($n =$) 2 diverse. The gender distribution reflects the common distribution in the fields of education and psychology in Germany.

The participants completed an online questionnaire in German, created and organized using the online survey tool TRIVIAN.

3.1.1. Measures

To adequately depict the assumed constructs of exclusivist beliefs, an instrument regarding exclusive placement of children with disabilities, transmissive beliefs toward learning and teaching, and the medical model of disability have been used. Two items within the exclusive category were adopted from the Teacher’s Attitude Toward Inclusion Scale [61]. Transmissive beliefs have been assessed with instruments by Kunter et al. [62] and supplemented by three newly developed items, making a total of eight items for transmissive beliefs. The model of disability has been assessed based on the instrument by Gebhardt et al. [63]. An exploratory factor analysis was conducted beforehand to check for internal consistency of the instruments. A total of 13 items were removed, nine of which were newly developed, as well as four items from Gebhardt et al. [63].

To measure authoritarianism, we used one item per subdimension of the Brief Scale of Authoritarianism (KSA-3) [52]. This three-item screening instrument (Authoritarianism—Ultra Short; A-US) has shown reliable psychometric properties across multiple large-scale applications [64]. Social Darwinism has been assessed with three items from the Leipzig Questionnaire on Extreme Right-Wing Attitudes (Fragebogen zur rechtsextremen Einstellung—Leipziger Form, FR-LF) [59, 60].

All items are consistently scaled on a 6-point rating scale (“I don’t agree at all” to “I fully agree”).

The newly developed placement scale (Exclusive Paradigm) shows a Cronbach’s alpha of $\alpha = 0.80$ and a McDonald’s Omega of $\omega = 0.81$, while the medical disability model scale shows a Cronbach’s alpha of $\alpha = 0.65$ ($\omega = 0.66$). The learning theory scale (transmissive beliefs) yields a Cronbach’s alpha of $\alpha = 0.80$ ($\omega = 0.81$). Additionally, Cronbach’s α for authoritarianism is $\alpha = 0.62$ ($\omega = 0.64$), and for Social Darwinism, it’s $\alpha = 0.71$ ($\omega = 0.73$). Reliability is (still) in an acceptable range; the relatively

Table 1
Descriptive statistics and translated English wording of the items used

Scale	Mean interpretation	Level			
1.00–2.49	Strongly Disagree, Disagree	Low			
2.50–3.49	Neutral	Medium			
3.50–5.00	Agree, Strongly Agree	High			
Constructs		M	SD	Skew	Kurtosis
Indicator variables at the individual level					
Transmissive beliefs (TRAN)		3.98	0.77	−0.06	3.06
Students learn best when they follow the instructions of the teacher. (tran1)		3.46	0.98	−0.26	2.71
Students learn best when presented with an example. (tran2)		4.2	1.08	−0.36	3.02
Most students need a number of examples to understand a task. (tran3)		4.31	1.02	−0.33	2.86
Students learn the most from demonstrations of exemplary tasks. (tran4)		4.32	0.95	−0.3	2.98
Students learn best from presentations and explanations of their teacher. (tran5)		3.69	1.05	−0.08	2.91
Medical Model of Disability (MED)		4.47	0.67	−0.25	3.45
Disability is caused by an inherent or acquired impairment. (med3)		4.57	0.92	−0.82	4.68
Disability manifests in long-term physical, mental, cognitive, or sensory impairment. (med4)		4.55	0.95	−0.89	5.28
Disability is caused by lacking or altered bodily structures or functions, as well as chronic and psychological diseases. (med5)		4.62	0.81	−1.03	5.49
Disability and illness mainly differ in duration of the impairment. (med7)		4.14	1.12	−0.78	3.48
Exclusive Paradigm (EX)		4	0.91	−0.027	2.89
Children with special educational needs learn best with children who have similar needs. (ex2)		3.65	1.13	−0.31	2.82
Children with special educational needs need the safe space of a special needs school. (ex3)		3.89	1.11	−0.2	3.14
We need special education schools to ensure the education of all children. (ex5)		4.57	1.12	−0.64	2.97
Special needs schools are the best placement for children with special educational needs. (ex6)		3.93	1.18	−0.36	2.70
Authoritarianism (AUT)		2	0.67	0.21	2.47
Established conducts should not be questioned. (CONV)		1.97	0.92	0.48	2.30
Troublemakers should clearly feel the effects of the fact that they are unwanted in the society. (AGR)		2.05	0.94	0.79	3.60
People should leave important decisions to those in charge/the leaders. (SUB)		2.01	0.78	0.17	2.10
Social Darwinism (SD)		1.33	0.54	2.62	10.90
As in nature, the strongest should always prevail in society. (SD1)		1.6	0.82	1.41	5.01
Actually, Germans are inherently superior to other people. (SD2)		1.18	0.51	3.04	12.10
There is valuable and unvaluable life. (SD3)		1.22	0.69	3.5	15.53

low alpha of authoritarianism should be noted at this point [65].¹ The mean scores of authoritarianism ($M = 2.00$) and Social Darwinism ($M = 1.33$) are extremely low in this sample. The wording and descriptive statistics of the items used as well as their theoretical constructs can be seen in Table 1.

3.2. Method

Since the relationship and mediation of effects of multidimensional constructs are to be investigated, the procedure of structural

equation modeling [67] with mediator effects is used [68]. For this purpose, the assumed dimensionality of the constructs is first examined confirmatory with a measurement model. Based on the theoretical considerations, the measured indicator items are then assigned to different factors and transferred into a structural model. Since the indirect effect of the mediator effect is the product of two regression coefficients, the assumption of the normal distribution of these effects in the population may be violated [68]. Additionally, the Doornik–Hansen [69] omnibus test rejects the null hypothesis of multivariate normality ($\chi^2(14) = 363.074; p < 0.000$). Since Nevitt and Hancock [70] suggest a sample size of at least 500 in order to get reasonable bootstrap results, we do not use bootstrap resampling to cope with nonnormality. Instead, we make use of the Satorra and Bentler [71] adjustment, which is robust to nonnormality and provides scaled goodness-of-fit indices to assess the model fit.

¹The rather low Cronbach's alpha of the A-US may be questionable—but as Ziegler et al. [66] point out, the mathematics of Cronbach's alpha is rather problematic for short scales such as the A-US, which focus on efficiency rather than reliability [65]. Since we are not focused on individual assessment here, we consider this to be acceptable.

4. Results

In this model, we assume three superordinate first-order factors: for RWA, we use three indicators—one for each subdimension of the stereotypical “hunching over and kicking down.” Three items were also assigned to the Social Darwinism factor, and three scales formed in advance (transmissive beliefs, medical model, exclusive paradigm) to the exclusion factor. To identify the model, the first factor loading of each of the items intended to measure the respective construct was fixed to 1.

The result of our structural equation model can be seen in Table 2 and is displayed as a path diagram in Figure 2.

All factor loadings are significant at $p < 0.001$, with the lowest factor loading being $\lambda = 0.34$, observed between the medical model of disability and the exclusion factor. The p -value (Satorra-Bentler scaled χ^2) = 0.33 is not significant. The likelihood ratio χ^2 test compares the present model with a saturated model, which has no restrictions ($df = 0$) and thus always fits the data perfectly. The present measurement model does not differ significantly from a saturated model [67]. In addition, the so-called scaled goodness-of-fit indices are used instead to test the goal of an approximate model fit [67]. The fit indices suggest a very good model fit: the Comparative Fit Index (CFI) compares a restrictive baseline model—which assumes that there is no relationship between the indicator variables (covariance = 0)—with the measurement model presented here. The scaled CFI for the measurement model is 0.99, meaning that the measurement model fits the data 99% better than the more restrictive baseline model. The cutoff criterion of the CFI is generally 0.95, in rarer cases 0.90, with values close to 1 corresponding to a good model fit [67]. In contrast, the scaled Root Mean Square Error of Approximation (RMSEA), which is based on the population discrepancy function, adjusts for unnecessary complexity, that is, for redundant paths that consume degrees of freedom without reducing discrepancy [67]. The scaled RMSEA for the measurement model is 0.024, which resembles a close fit to our model [67]. Whether the covariances are overestimated or

underestimated can be checked by means of the root mean squared residual (RMR)—but since the size of these residuals depends on the respective scaling of the indicator items or their variance range, the standardized variant of the RMR, the SRMR, is used in the following [67]. The scaled SRMR of 0.042 presented here also corresponds to a good model fit [67].

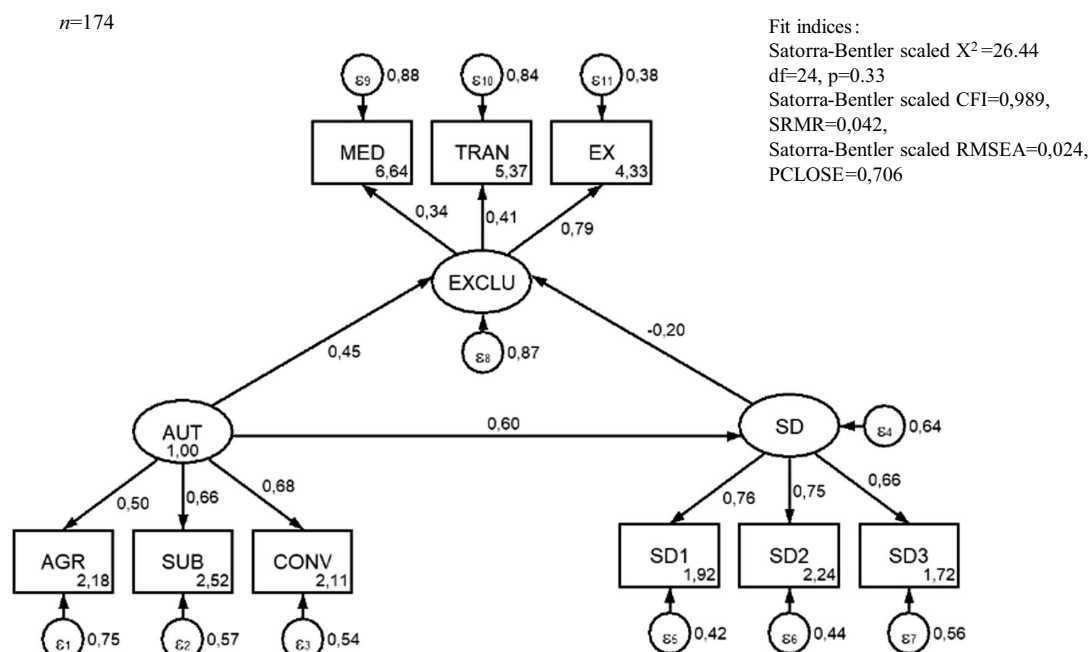
Authoritarianism as a latent variable consisting of conventionalism, aggression, and submission is significantly related to exclusivist attitudes toward people with disabilities. Our data confirm the hypothesized relationship in H1. H2 can also be preliminarily confirmed: authoritarianism is significantly related to Social Darwinist attitudes. Hypotheses H3 and H4, on the other hand, cannot be accepted on the basis of our data set because we cannot observe a significant relationship between Social Darwinism and exclusivist attitudes. We will discuss these counter-hypothesized results in the following section.

The share of explained variance of the exclusion factor is 14%, while that of the Social Darwinism factor is 35%.

5. Discussion

This study represents the first attempt to explore the influence of authoritarianism, with an explicit consideration of the possible mediating role of Social Darwinist attitudes, on a comprehensive understanding of exclusivist attitudes toward inclusive education. Inclusive education, in this study, was operationalized based on a recently developed theoretical framework by Selisko et al. [11]: a combination of segregated placement preferences, transmissive learning and teaching beliefs, and adherence to the medical model of disability. Our findings confirm that authoritarianism significantly predicts these exclusivist attitudes, which is in line with existing literature emphasizing rigidity, conformity, and adherence to the status quo in authoritarian attitudes, as the inclusion of people with disabilities may represent a “threat” to the societal status quo and group conformity [3–5, 58]. The theoretical implications of these findings are noteworthy. By confirming the robust

Figure 2
Path diagram of the proposed mediation model with standardized coefficients



relationship between authoritarianism and a comprehensive measure of exclusivist attitudes, our study extends previous research that connects authoritarian attitudes with resistance to social change and egalitarian principles.

Although Social Darwinism—a dimension of far-right attitudes that views society through a biologicistic lens and is closely linked to the devaluation of people with disabilities—is significantly correlated with authoritarianism, its lack of a direct significant contribution to exclusivist attitudes in our sample warrants further discussion. One plausible explanation lies in the demographic characteristics of our sample—predominantly young and female students. Prior research suggests that younger individuals and women typically exhibit lower levels of Social Darwinist thinking [59]. This demographic trend may explain the relatively low variance and limited explanatory power of Social Darwinism observed here. Comparatively, population-representative surveys in Germany have consistently reported higher agreement with Social Darwinist attitudes, particularly among older and more diverse cohorts [59].

Practical implications also emerge from our findings. The significant role of authoritarianism highlights the need for interventions that challenge hierarchical and rigid belief systems among future educators. Educational programs should incorporate components that promote critical thinking, empathy, and openness to diversity, which have been shown to mitigate authoritarian tendencies [72]. Additionally, while the low levels of Social Darwinist attitudes in our sample are reassuring, continuous efforts are needed to address and preemptively counteract such beliefs, not only in society but particularly in teaching contexts.

5.1. Conclusion and outlook

In conclusion, our study contributes to the growing literature on the psychological and ideological underpinnings of exclusivist attitudes toward inclusive education. By highlighting the central role of authoritarianism and analyzing the direct impact of Social Darwinism within this specific sample, we offer new insights and open pathways for further investigation. Building on these findings with more diverse samples and methodological approaches will be crucial for developing effective strategies to promote inclusive education in diverse societal contexts.

Several conclusions can be drawn from the study. First and foremost, barriers to inclusive education, especially from an

attitudinal perspective, pose an important area of research. The operationalization of exclusivist attitudes through the tripartite model offers a nuanced framework for understanding resistance to inclusive education. This comprehensive approach can serve as a valuable tool for future studies aiming to investigate similar phenomena across different cultural and educational contexts. Prevalent societal attitudes toward people with disabilities and their inclusion or exclusion within educational contexts cannot be disregarded in the field of inclusive education. Large-scale studies show that authoritarianism and the devaluation of people with disabilities are prevalent and therefore pose a great threat to inclusive education. Even the comparable small sample of student teachers shows a significant influence of authoritarianism on exclusive attitudes. This study contributes to the discourse by investigating a coherent attitude that opposes inclusive education. Future research could replicate this study with more heterogeneous samples to explore whether Social Darwinism plays a stronger mediating role under different conditions: in particular, measurement invariance analyses of the relationships (not) observed here between groups of high and low education could open up perspectives for follow-up research.

Future research should combine these considerations with further aspects related to attitudes toward the education of children with disabilities. Previous contact/experiences and self-efficacy show potential in adapting to the existing requirements of inclusive education. A sample of in-service teachers and other professionals could shed light on the effects of teaching practice [37, 73, 74]. Even if the methods, funds, and resources for inclusive education are provided, it cannot be implemented within a society that devalues people with disabilities and not by teachers who hold transmissive beliefs about learning and teaching.

5.2. Limitations

Finally, it is essential to address the limitations of our study. The relatively homogeneous sample limits the generalizability of our findings: because of the convenient and homogeneous sample (female, student teachers, and psychology students), authoritarianism itself is hardly prevalent (and that, although it is much less subject to an effect of social desirability than Social Darwinism), and subsequently, there is also no notable Social Darwinism prevalent in this sample, as can be seen by the distribution (Table 2). This is a good sign, considering that representative studies of the general

Table 2
Structural equation model with exclusion as outcome variable

N = 181				
→ Outcome variable	ML-estimator (standardized coefficients)	SD (Satorra-Bentler)	z	Hypothesis
Independent variables				
Direct effects				
→ Exclusion				
Authoritarianism	0.45**	0.17	2.65	H1
Social Darwinism	−0.20	0.16	−1.26	H4
→ Social Darwinism				
Authoritarianism	0.60***	0.11	5.71	H2
Indirect effects				
Authoritarianism → Social Darwinism → Exclusion	−0.12	0.05	−1.08	H3
Overall R ²	73%			

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.
The breakdown into total effects is omitted since the indirect effect is not significant.

population show otherwise. Nonetheless, of course, our sample is not representative of female student teachers either. While it is a good sign that the effect of authoritarianism in our non-representative study is not mediated by an extreme right-wing attitudinal trait such as Social Darwinism, at the same time, it remains possible that exclusivist attitudes toward inclusion in the general population are more strongly influenced by authoritarianism and that a mediation via Social Darwinism still occurs here. The latter would need to be tested with larger and representative samples. A more diverse sample, including participants from different age groups, educational backgrounds, and professional experiences, could provide a richer understanding of the interplay between authoritarianism, Social Darwinism, and exclusivist attitudes.

A general limitation of the medical model of disability is the oversimplification of disability. In the context of inclusive education, attitudes may differ regarding the disability in question. While the exclusion of students with physical impairments from regular education could be attributed to environmental factors, cognitive impairments might be perceived as an individual precondition to partake. This distinction and the possibility of changing models of disability based on the type of participation should be incorporated into future research.

Additionally, while our study relied on self-reported measures, future research might benefit from incorporating observational, experimental [4], or even behavioral data to capture implicit biases that might not be evident through surveys alone. Factorial surveys (e.g., vignette analyses) could be an innovative experimental method that could further investigate the relationships observed here and, at the same time, reduce the bias of social desirability.

The consideration of SDO, as applied to similar research on attitudes toward inclusive education [6], in addition to further constructs, such as the contact hypothesis [75], would enrich the data regarding this relatively new framework of exclusive attitudes [28]. Especially for teachers, self-efficacy or the lack thereof has been often considered influential in regard to attitudes toward inclusive education [76, 77].

Acknowledgement

We would like to express our special thanks to Holger Hübner and Thomas Jensen who generously provided our team and us with the environment necessary to embark on the journey, which led to the present publication.

Conflicts of Interest

The authors declare that they have no conflicts of interest to this work.

Data Availability Statement

Data are available from the corresponding author upon reasonable request.

Author Contribution Statement

Tom Jannick Selisko: Conceptualization, Methodology, Investigation, Resources, Data curation, Writing – original draft, Writing – review & editing, Supervision, Project administration.
Marius Dilling: Conceptualization, Methodology, Formal analysis, Data curation, Writing – original draft, Writing – review & editing, Visualization, Supervision, Project administration.

References

- [1] Adorno, T. W., Frenkel-Brunswick, E., Levinson, D. J., & Sanford, R. N. (1950). *The authoritarian personality*. USA: Harper.
- [2] Altemeyer, B. (1981). *Right-wing authoritarianism*. Canada: University of Manitoba Press.
- [3] Decker, O., Kiess, J., & Brähler, E. (2022). *The dynamics of right-wing Extremism within German society: Escape into authoritarianism*. UK: Taylor & Francis.
- [4] Slavchova, V. (2021). *Der schmale grat zwischen inklusion und stigmatisierung von gesundheitlich beeinträchtigten menschen bei ihrer beruflichen teilhabe* [The thin line between inclusion and stigmatisation of persons with impairments in their vocational participation]. PhD Thesis, RWTH Aachen University
- [5] Crowson, H. M., Brandes, J. A., & Hurst, R. J. (2013). Who opposes rights for persons with physical and intellectual disabilities? *Journal of Applied Social Psychology*, 43(S2), E307–E318. <https://doi.org/10.1111/jasp.12046>
- [6] Brandes, J. A., & Crowson, H. M. (2009). Predicting dispositions toward inclusion of students with disabilities: The role of conservative ideology and discomfort with disability. *Social Psychology of Education*, 12(2), 271–289. <https://doi.org/10.1007/s11218-008-9077-8>
- [7] Wescott, H. N., MacLachlan, M., & Mannan, H. (2020). Disability inclusion and global development: A preliminary analysis of the United Nations partnership on the rights of persons with disabilities programme within the context of the convention on the rights of persons with disabilities and the sustainable development goals. *Disability, CBR & Inclusive Development*, 31(4), 90–115. <https://doi.org/10.47985/dcidj.397>
- [8] Saloviita, T. (2020). Attitudes of teachers towards inclusive education in Finland. *Scandinavian Journal of Educational Research*, 64(2), 270–282. <https://doi.org/10.1080/00313831.2018.1541819>
- [9] Jury, M., Perrin, A.-L., Rohmer, O., & Desombre, C. (2021). Attitudes toward inclusive education: An exploration of the interaction between teachers' status and students' type of disability within the French context. *Frontiers in Education*, 6, 655356. <https://doi.org/10.3389/feduc.2021.655356>
- [10] Lindner, K.-T., Schwab, S., Emara, M., & Avramidis, E. (2023). Do teachers favor the inclusion of all students? A systematic review of primary schoolteachers' attitudes towards inclusive education. *European Journal of Special Needs Education*, 38(6), 766–787. <https://doi.org/10.1080/08856257.2023.2172894>
- [11] Selisko, T. J., Eckert, C., & Perels, F. (2024). Models of disability as distinguishing factor: A theoretical framework of inclusive education and the application to a literature review. *Cogent Education*, 11(1), 2379681. <https://doi.org/10.1080/2331186X.2024.2379681>
- [12] Nilholm, C. (2021). Research about inclusive education in 2020 – How can we improve our theories in order to change practice? *European Journal of Special Needs Education*, 36(3), 358–370. <https://doi.org/10.1080/08856257.2020.1754547>
- [13] Lindner, K. T., & Schwab, S. (2025). Differentiation and individualisation in inclusive education: A systematic review and narrative synthesis. *International Journal of Inclusive Education*, 29(12), 2199–2219. <https://doi.org/10.1080/13603116.2020.1813450>

- [14] Francisco, M. P. B., Hartman, M., & Wang, Y. (2020). Inclusion and special education. *Education Sciences*, 10(9), 238. <https://doi.org/10.3390/educsci10090238>
- [15] Finkelstein, S., Sharma, U., & Furlonger, B. (2021). The inclusive practices of classroom teachers: A scoping review and thematic analysis. *International Journal of Inclusive Education*, 25(6), 735–762. <https://doi.org/10.1080/13603116.2019.1572232>
- [16] Choi, J. H., McCart, A. B., & Sailor, W. (2020). Reshaping educational systems to realize the promise of inclusive education. *FIRE: Forum for International Research in Education*, 6(1), 8–23.
- [17] Göransson, K., Nilholm, C., & Karlsson, K. (2011). Inclusive education in Sweden? A critical analysis. *International Journal of Inclusive Education*, 15(5), 541–555. <https://doi.org/10.1080/13603110903165141>
- [18] Johnstone, C. J., Sefuthi, N., & Hayes, A. (2022). The democratization of inclusive education: Political settlement and the role of disabled persons organizations. *Comparative Education Review*, 66(4), 688–708. <https://doi.org/10.1086/721767>
- [19] Love, H. R., & Horn, E. (2021). Definition, context, quality: Current issues in research examining high-quality inclusive education. *Topics in Early Childhood Special Education*, 40(4), 204–216. <https://doi.org/10.1177/0271121419846342>
- [20] Booth, T., & Ainscow, M. (2002). *Index for inclusion: Developing learning and participation in schools*. UK: Centre for Studies on Inclusive Education.
- [21] Krämer, S., Möller, J., & Zimmermann, F. (2021). Inclusive education of students with general learning difficulties: A meta-analysis. *Review of Educational Research*, 91(3), 432–478. <https://doi.org/10.3102/0034654321998072>
- [22] Kart, A., & Kart, M. (2021). Academic and social effects of inclusion on students without disabilities: A review of the literature. *Education Sciences*, 11(1), 16. <https://doi.org/10.3390/educsci11010016>
- [23] Burke, K. M., Raley, S. K., Shogren, K. A., Hagiwara, M., Mumbardó-Adam, C., Uyanik, H., & Behrens, S. (2020). A meta-analysis of interventions to promote self-determination for students with disabilities. *Remedial and Special Education*, 41(3), 176–188. <https://doi.org/10.1177/0741932518802274>
- [24] van Mieghem, A., Verschueren, K., Petry, K., & Struyf, E. (2020). An analysis of research on inclusive education: A systematic search and meta review. *International Journal of Inclusive Education*, 24(6), 675–689. <https://doi.org/10.1080/13603116.2018.1482012>
- [25] Göransson, K., & Nilholm, C. (2014). Conceptual diversities and empirical shortcomings: A critical analysis of research on inclusive education. *European Journal of Special Needs Education*, 29(3), 265–280. <https://doi.org/10.1080/08856257.2014.933545>
- [26] Kielblock, S., & Woodcock, S. (2023). Who's included and Who's not? An analysis of instruments that measure teachers' attitudes towards inclusive education. *Teaching and Teacher Education*, 122, 103922. <https://doi.org/10.1016/j.tate.2022.103922>
- [27] Seitz, S., Berti, F., & Hamacher, C. (2023). Throughout the day on the way to more educational justice? Children's voices on all day-primary schooling. In S. Seitz, P. Auer, & R. Bellacicco (Eds.), *International perspectives on inclusive education: In the light of educational justice* (pp. 91–117). Verlag Barbara Budrich.
- [28] Selisko, T. J., Klopp, E., Eckert, C., & Perels, F. (2024). Attitudes toward inclusive education from a network perspective. *Education Sciences*, 14(3), 319. <https://doi.org/10.3390/educsci14030319>
- [29] Zaks, Z. (2024). Changing the medical model of disability to the normalization model of disability: Clarifying the past to create a new future direction. *Disability & Society*, 39(12), 3233–3260. <https://doi.org/10.1080/09687599.2023.2255926>
- [30] Blackie, D., & Moncrieff, A. (2022). State of the field: Disability history. *History*, 107(377), 789–811. <https://doi.org/10.1111/1468-229X.13315>
- [31] Lawson, A., & Beckett, A. E. (2021). The social and human rights models of disability: Towards a complementarity thesis. *The International Journal of Human Rights*, 25(2), 348–379. <https://doi.org/10.1080/13642987.2020.1783533>
- [32] Ianes, D., Demo, H., & Dell'Anna, S. (2020). Inclusive education in Italy: Historical steps, positive developments, and challenges. *Prospects*, 49(3), 249–263. <https://doi.org/10.1007/s11125-020-09509-7>
- [33] Kauffman, J. M., & Hornby, G. (2020). Inclusive vision versus special education reality. *Education Sciences*, 10(9), 258. <https://doi.org/10.3390/educsci10090258>
- [34] Hofmann, M. (2022). (Ab) normality and (in) educability – Whose voices can be found in historical sources on intellectually “abnormal” children? *Paedagogica Historica*, 58(3), 349–362. <https://doi.org/10.1080/00309230.2022.2036780>
- [35] Rydström, J. (2019). Disability, socialism and autonomy in the 1970s: Case studies from Denmark, Sweden and the United Kingdom. *Disability & Society*, 34(9–10), 1637–1659. <https://doi.org/10.1080/09687599.2019.1605883>
- [36] Charmaz, K. (2020). Experiencing stigma and exclusion: The influence of neoliberal perspectives, practices, and policies on living with chronic illness and disability. *Symbolic Interaction*, 43(1), 21–45. <https://doi.org/10.1002/symb.432>
- [37] Selisko, T. J., Eckert, C., & Perels, F. (2024). The who and what of inclusive education—Profiles of student teachers' attitudes toward inclusive education. *Frontiers in Education*, 9, 1433739. <https://doi.org/10.3389/feduc.2024.1433739>
- [38] Allport, G. W. (1935). Attitudes. In C. Murchison (Ed.), *Handbook of social psychology* (pp. 798–844). Clark University Press.
- [39] Schwarz, N., & Böhner, G. (2001). The construction of attitudes. In A. Tesser & N. Schwarz (Eds.), *Blackwell handbook of social psychology: Intraindividual processes* (pp. 436–457). Wiley. <https://doi.org/10.1002/9780470998519.ch20>
- [40] Guillemot, F., Lacroix, F., & Nocus, I. (2022). Teachers' attitude towards inclusive education from 2000 to 2020: An extended meta-analysis. *International Journal of Educational Research Open*, 3, 100175. <https://doi.org/10.1016/j.ijedro.2022.100175>
- [41] Byrne, B. (2022). How inclusive is the right to inclusive education? An assessment of the UN convention on the rights of persons with disabilities' concluding observations. *International Journal of Inclusive Education*, 26(3), 301–318. <https://doi.org/10.1080/13603116.2019.1651411>
- [42] Hernández-Torrano, D., Somerton, M., & Helmer, J. (2022). Mapping research on inclusive education since Salamanca Statement: A bibliometric review of the literature over 25 years. *International Journal of Inclusive Education*, 26(9), 893–912. <https://doi.org/10.1080/13603116.2020.1747555>
- [43] Yada, A., Leskinen, M., Savolainen, H., & Schwab, S. (2022). Meta-analysis of the relationship between teachers' self-efficacy and attitudes toward inclusive education. *Teaching*

- and Teacher Education, 109, 103521. <https://doi.org/10.1016/j.tate.2021.103521>
- [44] Reid, N., & Amanat Ali, A. (2020). Beliefs and attitudes. In N. Reid & A. Amanat Ali (Eds.), *Making sense of learning: A research-based approach* (pp. 253–279). Springer International Publishing. https://doi.org/10.1007/978-3-030-53677-0_11
- [45] Fives, H., & Buehl, M. M. (2016). Teachers' beliefs, in the context of policy reform. *Policy Insights from the Behavioral and Brain Sciences*, 3(1), 114–121. <https://doi.org/10.1177/2372732215623554>
- [46] Eagly, A. H., & Chaiken, S. (2007). The advantages of an inclusive definition of attitude. *Social Cognition*, 25(5), 582–602. <https://doi.org/10.1521/soco.2007.25.5.582>
- [47] Charitaki, G., Kourti, I., Gregory, J. L., Ozturk, M., Ismail, Z., Alevriadou, A., & Demirel, C. (2024). Teachers' attitudes towards inclusive education: A cross-national exploration. *Trends in Psychology*, 32, 1120–1147. <https://doi.org/10.1007/s43076-022-00240-0>
- [48] Lauchlan, F., & Boyle, C. (2020). Labelling and inclusive education. In G. W. Noblit (Ed.), *Oxford research encyclopedia of education* (pp. 1–24). Oxford University Press. <https://doi.org/10.1093/acrefore/9780190264093.013.1021>
- [49] Fromm, E. (1936). Sozialpsychologischer teil [The social-psychological part]. In M. Horkheimer, E. Fromm, & H. Marcuse (Eds.), *Studien über autorität und familie. Forschungsberichte aus dem Institut für Sozialforschung* (pp. 77–135). Springer.
- [50] Decker, O., Kiess, J., & Brähler, E. (2024). Antisemitismus als individuelles Ressentiment und gesellschaftliches Sediment – empirische Befunde [Antisemitism as individual resentment and societal sediment – Empirical findings]. In O. Decker, J. Kiess, A. Heller, & E. Brähler (Eds.), *Vereint im Ressentiment: Autoritäre Dynamiken und rechtsextreme Einstellungen* (pp. 133–160). Psychosozial-Verlag. <https://doi.org/10.30820/9783837962864-133>
- [51] Ilser, J. A. (2006). *Vorurteile: Zur Rolle von persönlichkeit, werten, generellen einstellungen und bedrohung. Die theorie grundlegender menschlicher werte, autoritarismus und die theorie der sozialen dominanz als erklärungsansätze für vorurteile: Ein integrativer theorienvergleich* [Prejudice: On the role of personality, values, general attitudes, and threat. The theory of basic human values, authoritarianism and the theory of social dominance as explanatory approaches to prejudice: An integrative comparison of theories]. PhD Thesis, University of Giessen.
- [52] Beierlein, C., Asbrock, F., Kauff, M., & Schmidt, P. (2014). *Die Kurzskaala Autoritarismus (KSA-3): Ein ökonomisches messinstrument zur erfassung dreier subdimensionen autoritärer einstellungen* [The Authoritarianism Short Scale (KSA-3): An economic measurement tool to capture three sub-dimensions of authoritarian attitudes]. Leibniz Institute for Social Sciences. <https://www.ssoar.info/ssoar/handle/document/42671>
- [53] Dilling, M., Heller, A., Kiess, J., & Brähler, E. (2024). Putting authoritarianism in context: A multilevel analysis of regional effects on individual expressions of right-wing authoritarianism, conspiracy mentality, and superstition. In A. Heller & P. Schmidt (Eds.), *Thirty years after the Berlin Wall: German unification and transformation research* (pp. 179–202). Routledge. <https://doi.org/10.4324/9781003427469-10>
- [54] Duckitt, J. (2001). A dual-process cognitive-motivational theory of ideology and prejudice. *Advances in Experimental Social Psychology*, 33, 41–113. [https://doi.org/10.1016/S0065-2601\(01\)80004-6](https://doi.org/10.1016/S0065-2601(01)80004-6)
- [55] Pratto, F., Sidanius, J., Stallworth, L. M., & Malle, B. F. (1994). Social dominance orientation: A personality variable predicting social and political attitudes. *Journal of Personality and Social Psychology*, 67(4), 741–763. <https://doi.org/10.1037/0022-3514.67.4.741>
- [56] Duckitt, J., & Sibley, C. G. (2007). Right wing authoritarianism, social dominance orientation and the dimensions of generalized prejudice. *European Journal of Personality*, 21(2), 113–130. <https://doi.org/10.1002/per.614>
- [57] Duckitt, J. (2022). Authoritarianism: Conceptualization, research, and new developments. In D. Osborne & C. G. Sibley (Eds.), *The Cambridge handbook of political psychology* (pp. 177–197). Cambridge University Press. <https://doi.org/10.1017/9781108779104.013>
- [58] Asbrock, F., & Kauff, M. (2015). Authoritarian disbeliefs in diversity. *The Journal of Social Psychology*, 155(6), 553–558. <https://doi.org/10.1080/00224545.2015.1038497>
- [59] Decker, O., Kiess, J., Heller, A., & Brähler, E. (2022). *Autoritäre Dynamiken in unsicheren Zeiten: Neue Herausforderungen – alte Reaktionen?* [Authoritarian dynamics in uncertain times: New challenges – Old reactions?]. Germany: Psychosozial-Verlag. <https://doi.org/10.30820/9783837979190>
- [60] Heller, A., Decker, O., & Brähler, E. (2020). Rechtsextremismus – ein einheitliches Konstrukt? Ein Beitrag zur Frage der Operationalisierung anhand des Fragebogens Rechtsextremismus–Leipziger Form (FR-LF) [Right-wing extremism – A standardised construct? A contribution to the question of operationalisation using the Right-Wing Extremism–Leipzig Form (FR-LF) questionnaire]. In A. Heller, O. Decker, & E. Brähler (Eds.), *Prekärer Zusammenhalt Die Bedrohung des demokratischen Miteinanders in Deutschland* (pp. 149–172). Psychosozial-Verlag. <https://doi.org/10.30820/9783837930504-149>
- [61] Boyle, C. (2014). *Teachers' attitudes towards inclusion scale adjusted* [Database record]. APA PsycTests. <http://doi.org/10.1037/t36360-000>
- [62] Kunter, M., Leutner, D., Seidel, T., Kunina-Habenicht, O., Dicke, T., & Linninger, C. (2016). BilWiss-UV - Ertrag und Entwicklung des universitären bildungswissenschaftlichen Wissens – Validierung eines Kompetenztests für Lehramtsstudierende [BilWiss-UV: Yield and development of university educational science knowledge: Validation of a competence test for student teachers]. In O. Zlatkin-Troitschanskaia, H. A. Pant, C. Lautenbach, & M. Toepper (Eds.), *Kompetenzmodelle und Instrumente der Kompetenzerfassung im Hochschulsektor – Validierungen und methodische Innovationen (KoKoHs): Übersicht der Forschungsprojekte* (pp. 27–31). Bundesministerium für Bildung und Forschung.
- [63] Gebhardt, M., Schurig, M., Suggate, S., Scheer, D., Diehl, K., Melzer, C., ..., & Capovilla, D. (2022). *Fragebogen zum konstrukt behinderung* [Questionnaire on the construct o disability]. University of Regensburg. https://epub.uni-regensburg.de/51337/1/Fragebogen%20zum%20Konstrukt%20Behindierung%20Version%2002_final.pdf
- [64] Heller, A., Decker, O., Schmalbach, B., Beutel, M., Fegert, J. M., Brähler, E., & Zenger, M. (2020). Detecting authoritarianism efficiently: Psychometric properties of the

- screening instrument authoritarianism–ultra short (A-US) in a German representative sample. *Frontiers in Psychology*, 11, 533863. <https://doi.org/10.3389/fpsyg.2020.533863>
- [65] Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in Science Education*, 48(6), 1273–1296. <https://doi.org/10.1007/s11165-016-9602-2>
- [66] Ziegler, M., Kemper, C. J., & Kruey, P. (2014). Short scales: Five misunderstandings and ways to overcome them. *Journal of Individual Differences*, 35(4), 185–189. <https://doi.org/10.1027/1614-0001/a000148>
- [67] Reinecke, J. (2014). *Strukturgleichungsmodelle in den Sozialwissenschaften* [Structural equation modelling in social sciences]. Germany: De Gruyter. <https://doi.org/10.1524/9783486854008>
- [68] Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. USA: Guilford Publications.
- [69] Doornik, J. A., & Hansen, H. (2008). An omnibus test for univariate and multivariate normality. *Oxford Bulletin of Economics and Statistics*, 70(s1), 927–939. <https://doi.org/10.1111/j.1468-0084.2008.00537.x>
- [70] Nevitt, J., & Hancock, G. R. (2001). Performance of bootstrapping approaches to model test statistics and parameter standard error estimation in structural equation modeling. *Structural Equation Modeling: A Multidisciplinary Journal*, 8(3), 353–377. https://doi.org/10.1207/S15328007SEM0803_2
- [71] Satorra, A., & Bentler, P. M. (1994). Corrections to test statistics and standard errors in covariance structure analysis. In A. von Eye & C. C. Clogg (Eds.), *Latent variables analysis: Applications for developmental research* (pp. 399–419). Sage Publications.
- [72] Osborne, D., Costello, T. H., Duckitt, J., & Sibley, C. G. (2023). The psychological causes and societal consequences of authoritarianism. *Nature Reviews Psychology*, 2(4), 220–232. <https://doi.org/10.1038/s44159-023-00161-4>
- [73] Ismailos, L., Gallagher, T., Bennett, S., & Li, X. (2022). Pre-service and in-service teachers' attitudes and self-efficacy beliefs with regards to inclusive education. *International Journal of Inclusive Education*, 26(2), 175–191. <https://doi.org/10.1080/13603116.2019.1642402>
- [74] Woodcock, S., & Jones, G. (2020). Examining the interrelationship between teachers' self-efficacy and their beliefs towards inclusive education for all. *Teacher Development*, 24(4), 583–602. <https://doi.org/10.1080/13664530.2020.1803957>
- [75] Rademaker, F., de Boer, A., Kupers, E., & Minnaert, A. (2020). Applying the contact theory in inclusive education: A systematic review on the impact of contact and information on the social participation of students with disabilities. *Frontiers in Education*, 5, 602414. <https://doi.org/10.3389/educ.2020.602414>
- [76] Dörrenbächer-Ulrich, L., Stark, L., & Perels, F. (2020). Profiles of teachers' concerns about heterogeneity in classrooms. *Educational Research and Evaluation*, 26(7–8), 433–459. <https://doi.org/10.1080/13803611.2021.1977153>
- [77] Savolainen, H., Malinen, O.-P., & Schwab, S. (2022). Teacher efficacy predicts teachers' attitudes towards inclusion: A longitudinal cross-lagged analysis. *International Journal of Inclusive Education*, 26(9), 958–972. <https://doi.org/10.1080/13603116.2020.1752826>

How to Cite: Selisko, T. J., & Dilling, M. (2026). The Opposition to Inclusive Education: Authoritarianism and Social Darwinism and Their Impact on Exclusive Attitudes in Education. *International Journal of Changes in Education*, 3(1), 90–100. <https://doi.org/10.47852/bonviewIJCE52024575>