Effects of EU Simulation Games on Pupils` Political Competencies

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Civics courses at school strive to promote students` political competencies, which according to the model of Detjen et al. (2012) incorporate content knowledge, abilities to make political judgments and take political action as well as motivational skills and attitudes. For achieving these goals, high hopes are placed on active learning tools such as political simulation games. Their anticipated advantages are of particular relevance with regard to problems identified for teaching about the European Union at school (Oberle & Forstmann, 2015b). In addition, political simulation games correspond especially well to the negotiation system of the European Union (cf. Brunazzo and Settembri, 2012). Although simulation games today are quite a well-known, internationally practiced method of teaching politics at school as well as University level, there is a profound lack of systematically won empirical evidence regarding its effects and preconditions (cf. Gosen and Washbush, 2004; Schnurr et al., 2014). The empirical study presented in this chapter addresses this research deficit: It analyzes the effects of simulation games taking into account both the "subjective" evaluation of the games by participants as well as the "objective" effects of the simulation games on a range of learners` political dispositions (competency dimensions a) political knowledge and b) motivations and attitudes) measured in a pre-post-design. Furthermore, the study analyses the relevance of several predictors for the subjective evaluation and objective effects of the game, such as gender and cultural capital as well as participants` political interest and political knowledge before the game. The study focuses on German secondary school pupils (N = 308; average age 16.75 years) and relatively short games (3 hours including introduction and debriefing) well usable in everyday teaching practice, simulating a decision of the European Parliament in three different policy areas (asylum policy, data protection, CO^2-emmissions of passenger cars). Item analysis for content knowledge was conducted in ConQuest, latent multiple regressions, structural equations and latent change models were calculated in MPlus 7.4.

In the first section, expectations regarding the advantages and problems of the simulation game method are discussed with a special focus on its potential for teaching about the European Union (EU) at school. Thereafter, an outline of the goals and design of the intervention study is given, followed by a presentation and discussion of its results. The chapter closes with a short outlook.

1. Simulation Games: a promising approach for teaching about the European Union at school?

Simulation games have become an established teaching approach both in economic and civic education and are implemented at school and in extra-curricular activities as well as at University level. In civic education, such games usually simulate a political decision-making procedure, involving clearly opposed political interests as well as a certain time pressure. Reality is reduced to a simplified model so that participants may experiment politics in a safe environment (cf., Klippert, 1984; Massing, 1997). As an action-, learner-, experience- and process-oriented didactic method, such simulation games entail several positive expectations (c.f. Raiser et al., 2015; Rappenglück, 2004; Usherwood, 2014): They intend to help reduce the complexity of politics – especially regarding political procedures – in order to render it easier to understand and to provide basic insights into the difficulties of reaching political compromises. The aim is to link the political to learners' everyday lives and to disseminate knowledge in an experience-based and hence sustainable fashion. Furthermore, it is assumed that due to the particular dynamics of the play and the self-activity of the players, simulation games motivate learners to engage with the subject matter and awaken resp. deepen their interest in politics.

These (anticipated) advantages of the method are of special relevance if we look at specific problems of teaching on the European Union (EU) in civics. While the EU today is a compulsory element of secondary-level civics lessons in general schools in all 16 of Germany's federal states (see von Geyr et al., 2007), teaching about it seems to face particular challenges. As early as 2004, the political scientists Joachim Detjen identified key problems of teaching about the EU, foremost among them the enormous complexity of the multi-level political system. In addition to the perceived hyper-complexity, the strong dynamics of European integration provides an obstacle for teaching and learning, since knowledge about the EU tends to be quickly out-dated. A perceived distance between the EU and its citizens as well as insufficient (perceived) relevance to their everyday life, a lack of interest in the EU, a lack of prior knowledge and prejudices on the part of learners present further challenges. A survey of 179 German civics teachers conducted in 2013 confirms these problems from a practitioners` view (Oberle & Forstmann, 2015b: 201): again, the EU's complexity is perceived as the greatest barrier to teaching on it, followed by its dynamics, pupils` lack of interest and prejudices. Considering the above-mentioned positive expectations towards the didactic approach of simulation games, there is reason to believe that by use of simulation games, which allow learners to actively engage with the political content in a reduced model of reality in a playful way, learning about EU can be successfully fostered.

However, there are also reservations about implementing political simulation games in civic education, particularly in the classroom context: Above all, scepticism relates to the large amount of time such games are said to take up as well as to a perceived lack of compatibility with the schedule of regular school lessons. There are also fears that such games do not allow a serious enough examination of the subject matter, with the "fun factor" outweighing the "learning factor". Furthermore, they risk distorting reality too strongly, thus creating a false illusion of reality. Finally, the strong self-dynamics of the game situation can put teachers off.

Although there is plenty of literature on the features of simulation games, there are surprisingly few empirical findings arrived at by systematic research regarding the perceived potential and risks of this teaching method (cf. Gosen & Washbush, 2004). As Schnurr et al. (2014: 402) state "much of the existing evidence assessing the learning impacts of simulations is anecdotal and, by and large, unsystematic". Occasionally, studies have conducted qualitative interviews or reflective essays seeking the opinions of pupils, students and teachers (see, e.g., Dierßen & Rappenglück, 2015; Jozwiak, 2012; Zeff, 2003). Quantitative studies on the effects and conditions of political simulation games (especially, but not only, in schools) supporting generalisations are rare (on the development of interests, albeit for the natural sciences, cf. Knogler & Lewalter, 2014; regarding University students, cf. Jones & Bursens, 2015; Rünz, 2015; for conditions influencing the substantive negotiation outcomes, see Fink, 2015; several interesting quantitative studies on simulation games` effects on students` political knowledge or attitudes use very small-n analyses, e.g., Krain & Lantis, 2006). This is even more the case for teaching on the EU in school civics lessons.

3. Political knowledge, motivations and attitudes as elements of political competence and goal of civic education

This study addresses this research deficit focusing on the effects of short simulations of the European Parliament on German secondary school pupils` EU-related political knowledge, political motivations and attitudes. According to the competence model of Detjen et al. (2012), content knowledge, motivations and attitudes are important elements of political competence. They are expected to be interrelated with other central dimensions of political competence such as the ability to make political judgments and take political action. The competence model by Detjen et al. thus builds on a relatively broad pedagogical-psychological definition of competence by Franz E. Weinert (2001), who defines competence as

> the cognitive abilities and skills that are available to individuals or that can be acquired by them in order to solve certain problems as well as the associated motivational, volitional and social willingness and abilities to successfully and responsibly apply solutions to problems in variable situations. (pp. 27-28)

Even if one prefers a narrower definition of competence focusing on purely cognitive dispositions, as Weinert himself sometimes suggested (e.g., 1999), motivational orientations remain a salient factor for competence acquisition resp. usage and should be taken into account by empirical studies: "all measures of competence should also include measures of competence-specific motivational aspects" (29).

Motivations can be considered both a goal and a prerequisite of successful teaching and learning (cf., Oberle & Leunig, 2016). While learners` political motivations – such as political interest and political self-efficacy – are important objectives of teaching politics, they are also expected to foster the willingness to engage with content as well as sustainable learning results (e.g., Köller et al. 2000).

Looking at political self-efficacy, one can distinguish between internal and external efficacy (Vetter, 1997; see also Oberle, 2012: 65–67): while *internal political efficacy* refers to perceptions of one's own politics-related knowledge and skills, *external political efficacy* is one's subjective perception of the system's responsiveness to citizens' interests, that is, one's assessment of whether "the political system is open to and reacts to the influence of its citizens" (Vetter & Maier, 2005: 57). Perceptions of responsiveness are closely related to trust in the political system or diffuse political support for it and as such could also be considered political attitudes (c.f. Massing, 2012).

Of course, perceptions of responsiveness and diffuse political support depend largely on the trustworthiness of a political system, its institutions and actors. At the same time, it must be emphasised that without a modicum of citizens' trust in their political institutions, representative democracy cannot survive (cf. Fuchs et al., 2002). It is uncertain, however, just how much trust is required to maintain a democratic political system (Schöne, 2016). Wilhelm Knelangen (2015) discusses this question in the context of the European Union based on data provided by the Eurobarometer: writing before the British referendum turned out in favour of Brexit, he identifies a crisis of trust among EU citizens that could pose a serious threat to the EU`s existence.

Promoting attitudes in civics lessons, however, is not an unproblematic aim, considering the widely recognised *Beutelsbach Consensus* (see Wehling, 1977; Oberle, 2016), which prohibits overwhelming the learner and requires that politically, scientifically or publicly controversial topics are to be treated as controversial in civic education. However, it is important to stress that certain fundamental values – such as human dignity, freedom and equality – are intrinsic to such principles. Conveying attitudes and values corresponding to a free democracy remains a balancing act.

The influence of empathic ethics of conviction in European Citizenship Education is often quite rightly criticised (c.f. Massing, 2004). Learners must also become familiar with critique of the European

unification process as well as alternative development scenarios and institutional designs. However, the openness toward Europe set out in the Basic Law (Art. 23) justifies a fundamentally positive evaluation of the European integration efforts in civic education in Germany. Following Easton (1965), it makes sense to differentiate between general and performance-based attitudes, that is, between a 'hard' and a 'soft' Euroscepticism (see Knelangen, 2011; 2015; Weßels, 2009). While a 'fundamental' rejection of the EU is not part of the goal of today's school education in Germany, a 'constructive' scepticism towards the EU certainly corresponds with the goals of EU civic education (c.f. Oberle, 2015).

Following Weinert (2001: 27 f.), willingness to participate in politics (volition) can also be seen as a component of political competence, while this again is not uncontroversial in the discourse on civic education in Germany (cf., Detjen, 2013: 215 ff.). Obviously, one cannot grade pupils' readiness to engage politically as one cannot grade their political attitudes at school. However, political participation in line with democratic values can be defined as a desirable outcome of civic education.

Finally, knowledge represents a central component of competence. According to Klieme (2004), competence entails "knowledge and skills" (13). Subject-specific competencies can neither be acquired nor used without content knowledge. Eurobarometer data on the correlation of EU knowledge and voting in European Parliamentary elections (see Westle, 2015) as well as analyses of reasons for voting abstention in the first Irish Lisbon referendum (see Oberle, 2012) underline the relevance of political knowledge for political judgement and action skills in the context of the European Union.

4. Aims and Research Questions

The intervention study seeks to systematically examine the effects of short EU simulation games on learners' EU-related political competencies, focusing on content knowledge, political motivations and attitudes. The study analyses on the one hand the development in dispositions captured both before and after the simulation games were conducted, and on the other hand pupils' subjective assessment of its quality and impact. The influence of general political interest as well as of socio-demographic background variables (gender, age, type of school) is studied on the impact of simulation games a) as measured in pre-post comparison and b) as perceived by the pupils. The following questions can be posed: (how) does participation in a short simulation game affect the pupils' knowledge about the EU, attitudes towards the EU, interest in the EU, EU-related internal political efficacy and willingness to participate in politics? How do the pupils themselves rate the simulation games and their effects? Do the effects of the simulation games display systematic differences for different groups of pupils (e.g., regarding their political interest)? The study's findings

are intended to contribute to a more appropriate assessment of the didactic value of these games, including their degree of reliance on learners` prior political interest and their potential for fostering political motivations such as political efficacy.

3. Study design

3.1 The short EU simulation game

The study examined short EU simulation games developed by planpolitik[1] and conducted by their staff at participating schools. The games simulate decision-making by the European Parliament as part of the EU`s co-decision procedure on a) asylum policy, b) data protection or c) $CO^2$ regulations (in relation to passenger cars). It is assumed that the relevance of these issues for pupils` lives is relatively accessible for today's adolescents. In this simulation game, pupils do not take on the roles of certain personalities, but are prescribed those of political actors (e.g., member of a committee allied to a political fraction represented in parliament and of a particular nationality). Each game consists of different phases such as parliamentary meetings, negotiations in specialist committees and plenary sessions with a final vote. The intervention took approximately three hours, including a short introduction regarding content (policy area and EU`s political system) and game organisation as well as debriefing. The simulations are kept short in recognition of the fact that in regular school lessons there is rarely time for more extensive simulation games.

3.2 Sample and data collection

Data were collected from 2013 to 2016 in pre-post design using partly standardised questionnaires. The intervention survey examined 15 short EU simulation games in a total of 12 schools. The sample comprises 308 pupils (51.2 % girls) who participated in one of the simulation games and both the pre- and post-collection surveys at the secondary level at grammar schools (57.8 %), comprehensive schools (11.7 %) and vocational schools (30.5 %) in Lower Saxony and North Rhine-Westphalia. Pupils' average age was 16.75 (SD=1.98). The written survey was conducted either a few days or directly before and a few days after the simulation game, care being taken to always ensure that there was no other teaching on the European Union except the simulation game unit between pre- and post-collection. In addition to the written questionnaires, guided interviews with pupils were conducted after several games.

3.3 Survey instruments

[1] Planpolitik (www.planpolitik.de/english/) offers simulation games for different target groups in various formats on a variety of themes, including the European Union (recently also online).

The questionnaire consisted of closed, semi-open and open questions. The closed questions on pupils' political dispositions and their assessments of the simulation games generally consisted of four-point Likert scales allowing agreement or disagreement with statements (to aid interpretation in the present chapter, scores have been reversed in a coherent manner: *1=disagree entirely, to 4=agree entirely*). In order to assess the changes in EU-related dispositions brought about by the simulation game, scales validated by earlier studies were collected both before and after the simulation game (items according to, *inter alia*, Deutsche Shell, 2010; Gille et al., 2006; Kerr et al., 2010; Oberle, 2012; Oberle & Forstmann, 2015a; Vetter, 2013; Westle, 2006). A five-factor construct was modelled for EU-related political attitudes, consisting of general attitudes on the EU, perceptions of the EU's responsiveness, attitudes on the EU's performance (focusing on democratic legitimacy), the significance of European elections and perceptions of the EU's relevance to everyday life. Internal political efficacy (with regard to EU) was estimated in a two-factor model, with the two dimensions a) subjective knowledge and b) discourse-related self-efficacy.

A two-factor model was also created for willingness to participate in EU-related politics, whereby an empirical and theory-led distinction could be made between basic and advanced willingness to participate. These two sub-facets were captured using (four-point) Likert scale items: a) basic engagement, involving relatively little effort (e.g., voting in European elections); b) advanced, more strenuous engagement (e.g., working in a party or other political group on EU issues; supporting the election campaign of a candidate for the European Parliament; standing for election oneself). Here we might introduce the differentiation category of "effort" (particularly investing time or giving up free time, "information costs", cf. Pickel, 2012). It appears that the classic categories of conventionality and institutionalisation, on the other hand, no longer serve as explanations for the distinction between empirically evident types of participation (ibid.). The sub-dimensions of basic and advanced willingness to participate in politics have already been established by the Göttingen WEUS II (see Oberle & Forstmann, 2015a; here, other than in the present study, "willingness to participate illegally" was integrated as a third dimension) and correspond to the findings of the ICCS study (cf. Kerr et al., 2010). Finally, learners' interest in the EU was determined using a four-level scaled single item ("Are you interested in the European Union? Please tick the answer that most closely reflects you: very interested – not interested at all").

Furthermore, the pre-test collected data on interest in politics (five-item scale adapted from Köller et al., 2000) and the socio-demographic background variables of gender, age, type of school and

Table 1 *Measurement models and item examples*

	Number of Items	α	χ²	CFI/TLI	RMSEA	Item example
Attitudes towards EU (5-factorial)						
I = in general	I = 4	I = .78/.78				I = 'I am glad that Germany is a member of the European Union'.
II = responsiveness	II = 3	II = .67/.59				II = 'The politicians of the European Union do not really attend to what people like me are thinking'. (*Recoded*)
III = (democratic) performance	III = 3	III = .71/.68	196.03 (109)***/	.96/.94//	.05/.05	III = 'How satisfied are you with the extent of people's participation regarding political decisions of the EU?'
IV = relevance of EP-elections	IV = 2	IV = .78/.77	204.32 (109)***	.95/.93		IV = 'It matters to me which candidate gains a seat and becomes a member of the European Parliament'.
V = relevance to everyday life	V = 5	V = .79/.78				V = 'The policy decisions of the EU have an impact on my life'.
EU-related internal efficacy (2-factorial)						
I = subjective knowledge	I = 5	I = .82/.74	45.56 (19)**/	.99/.99//	.07/.04	I = 'Altogether, I am familiar with the European Union'.
II = discourse-related efficacy	II = 3	II = .82/.77	26.72 (19); ns	.99/.99		II = 'When the European Union is being discussed, I usually have something to say about it'.
Willingness to participate in EU (2-factorial)						'Today, there are various opportunities to participate in the EU. In which of the following could you see yourself taking part?'
I = basic	I = 2	I = .68/.72	15.64 (13); ns/	1.00/.99//	.03/.06	I = '… voting in European elections'.
II = advanced	II = 5	II = .80/.82	26.53 (13)*	.99/.98		II = '…getting in touch with a member of the EP'.
Interest in politics	5	.90	6.18 (5); ns	1.00/.100	.03	'Learning about politics is very important to me –regardless of school and other people'.
Assessment of simulation (3-factorial)				.96/.95	.05	
I = in general	I = 11	I = .86				I = 'Altogether, how satisfied are you with the simulation game?'
II = learning effect	II = 6	II = .82	320.12 (186)***			II = 'Through the simulation game … I all in all better understand how the EU works'.
III = motivation reg. EU and politics)	III = 4	III = .89				III = 'The simulation game … has motivated me to further occupy myself with the EU'.

CFI: Comparative Fit Index; RMSEA: Root Mean Square Error of Approximation; EU: European Union; TLI: Tucker–Lewis index; EP: European Parliament.
*p<0.05, **p<0.01, ***p<0.001.

cultural capital of the parental home (proxy indicator: books at home; *scale: 1=no/low cultural capital; 6=high cultural capital*; e.g., ICCS 2009, see Kerr et al., 2010). The three-factor construct concerning pupils' assessment of the simulation game and its effects – a) general satisfaction with

the simulation game, b) experienced learning effect and c) perceived increase in interest in EU resp. politics and motivation to engage politically; collected of course only in the post-test – was newly developed in this study and also provides a good data fit. Measurement models and advanced analyses were calculated in Mplus 7.4, treating Likert scale items as categorical variables and taking into consideration the hierarchical structure of the data (Mplus command=type is COMPLEX). For measurement models of the latent constructs as well as sample items, see table 1.

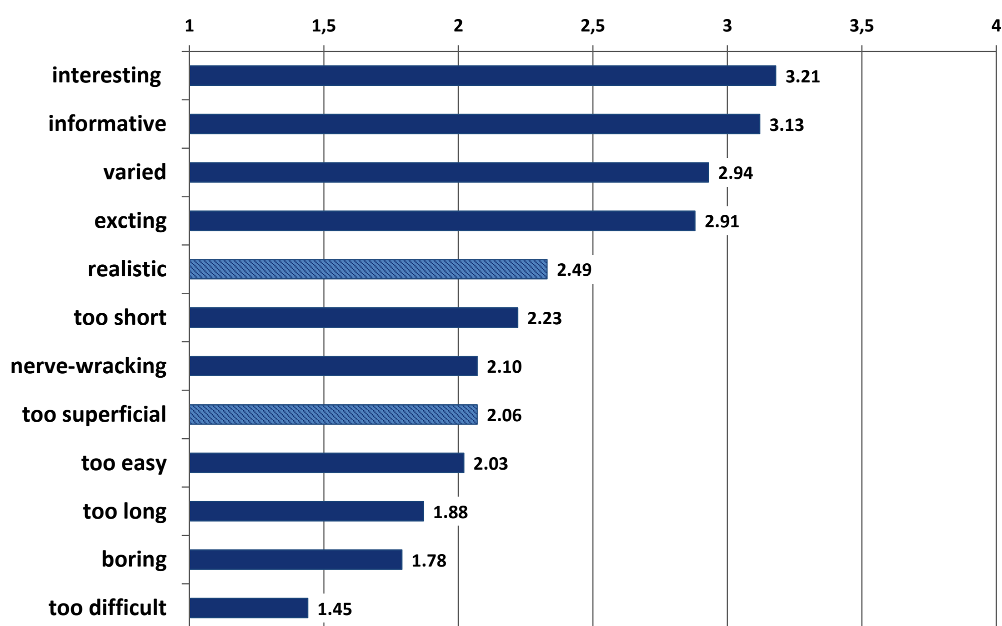
Twenty-four multiple-choice items with mainly three distractors and one correct answer captured objective knowledge about the EU (developed building on Oberle, 2012; Oberle & Forstmann, 2015a). Here, the focus was on EU institutions and law-making processes (especially co-decision procedure as ordinary legislative procedure), particularly the role of the European Parliament, as well as on general knowledge (e.g., the EU's goals, its number of member states, its dynamics). Using ConQuest, a Rasch model was applied showing a good fit to the data (WLE/EAP=.73/.74, Variance=.66, Discrimination=.20-.48).

4. Results

Students` overall evaluation of the simulation game is positive: 94.8 % of participants were satisfied (35.3 % "very satisfied") with the game and 77.1 % stated they would like to participate in such a simulation again. 90.6 % would recommend the simulation they experienced to others.

Fig. 1 *Adjectives attributed to the simulation game by the pupils (mean values)*

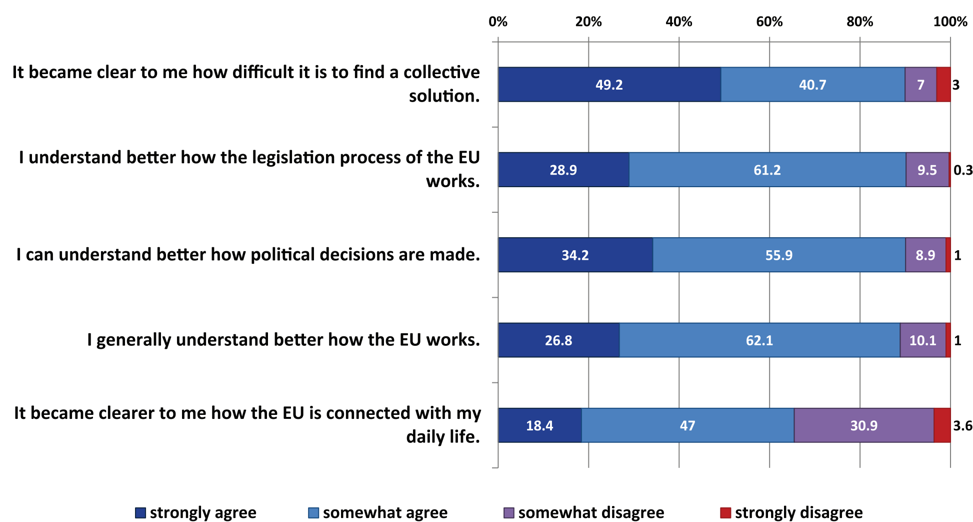
"The simulation game was … "



In addition, participants were asked to associate the game they played with a selection of adjectives (see figure 1): Thus, from the pupils' perspective, the simulation games conducted can be described as an interesting, instructive and varied experience with an appropriate level of difficulty and a duration suitable in the school context.

The students express a clear increase in their understanding of political processes and the way the EU functions (see figure 2). They state that gaining an insight into how difficult it is to arrive at common decisions, compromises or "solutions" made a profound impression. This learning effect seems particularly relevant given that reservations about the EU (and politics in general) often relate to the length of decision-making procedures or long-winded and conflict-laden political discourses. The pupils also confirm the positive effect of the simulation game on their perception of the EU's relevance for everyday life (also see table 2).

Fig. 2 *Effects of simulation game from the pupils` perspective (percentages)*



After participating in EU simulation games, including the short subject-specific introduction by the staff of planpolitik, pupils demonstrate significantly greater knowledge about the EU. Mean value comparisons (see table 2) reveal a medium-size effect (Cohen's d=.42). Multiple regressions and structural equations do not display direct differences in relation to gender, age, cultural capital or type of school (cf., Oberle & Leunig, forthcoming-b). However, above-average gains in knowledge were attained by learners with a low level of prior knowledge about the EU. This may be due to a ceiling effect (items were too easy for some pupils, especially in post-test), but also indicates that learners without much prior knowledge were not left behind.

Table 2 *Mean values (M) and standard deviations (SD) in the pre- and post-test; effect size of changes (Cohen's d) for constructs captured before and after the simulation game*

		Pre-test		Post-test		Cohen's d
		M	SD	M	SD	
Attitudes towards EU	In general	3.25	.53	3.31	.50	.12
	Responsiveness	2.37	.53	2.58	.47	.42
	Performance	2.78	.55	2.90	.46	.24
	Relevance of EP-elections	2.45	.76	2.63	.74	.24
	Relevance to everyday life	2.82	.55	2.96	.53	.26
Willingness to politically participate (EU)	Basic	3.10	.71	3.13	.74	.04
	Advanced	2.03	.57	2.13	.66	.16
EU-related internal efficacy	discourse-related efficacy	2.33	.72	2.51	.64	.26
	subjective knowledge	2.75	.54	3.02	.41	.56
Objective knowledge (EU)		14.33	4.40	16.01	3.50	.42
Interest in EU		2.60	.65	2.69	.60	.14
Interest in politics		2.59	.70			
Participants' evaluation of simulation game	general contentment			3.08	.31	
	learning effects			3.09	.47	
	motivation (regarding EU, politics)			2.49	.66	

EU: European Union; EP: European Parliament.
1 = strongly disagree, 2 = somewhat disagree, 3 = somewhat agree, 4 = strongly agree; objective knowledge: 0–24.
Classification according to Cohen's d: d ≥ .20 = weak effect; d ≥ .50 = medium effect; d ≥ .80 = strong effect.

Manifest mean scales allow for analysing mean values and mean differences of the other dispositions, too. Pre-post mean value comparisons (see table 2) reveal that participation in the simulation game had slight to medium effects on pupils' attitudes towards the EU, these being more positive in the post-test, as well as on the learners' internal political efficacy, which was more noticeable after participation in the game. What is striking are the medium effect sizes for changes in subjective knowledge about the EU (Cohen's d=.56) and perceptions of the EU's responsiveness (Cohen's d=.42) – with higher values to be observed after participation in the game. The general attitudes concerning the EU (M=3.25; SD=.53), however, were already relatively positive before the game and did not undergo significant changes. For the overall sample, no significant effects could be observed regarding students` interest in the EU (captured by a single item, thus reducing reliability of the findings) and regarding their willingness to participate in EU-related politics.

The prominent change in the pupils' perceptions of the EU's responsiveness is quite surprising, since they only experienced a simulation of the political decision-making process without getting to know real actors personally. This attitudinal change might be considered problematic, given that the aim of civics lessons and simulation games is not to create unreflective euphoria concerning the EU or an illusion of reality. Hence, the development of the perception of responsiveness in the sample needs to be investigated more closely. Before participation in the simulation game, learners' perception of

EU responsiveness was overall slightly negative (M=2.37); however, the standard deviation of SD=.53 shows greater variation in the sample.

In order to ascertain how pupils with different perceptions of responsiveness develop between the pre- and the post-test, "responsiveness types" were generated. Based on the pre-test data, latent class analyses were conducted in Mplus 7.4 (LCA) which suggest a two-class solution (see Oberle & Leunig, forthcoming-b). The two types differ in terms of their level of perceived EU responsiveness. Type 1 (n=151 pupils) perceives the EU as rather unresponsive (M=1.96; SD=.36), while type 2 (n=150 pupils) tends towards a slightly positive estimation of its responsiveness (M=2.77; SD=.52). The group of pupils belonging to type 1, with a negative perception of responsiveness, contains a higher number of vocational school pupils and has less cultural capital than the group with a more positive perception of responsiveness. A significant change in perception of responsiveness can only be seen in type 1, this being extraordinarily strong (Cohen's d=1.34) and tending towards a medium value (M=2.52, SD=.47).

The analyses of the responsiveness types demonstrate, then, that the simulation game did not contribute to an increase in prior positive perceptions of responsiveness or indeed to euphoric feelings about the EU, but led to a less negative attitude in pupils with a prior sceptical, negative assessment of responsiveness. One interpretation, supported by the accompanying interviews, is that adopting the roles of parliamentarians increased pupils` identification with politicians in the EU, and that increased understanding of the difficulties of finding solutions to political problems and reaching political comprises may have caused pupils to question their general assumptions regarding the incompetence or aloofness of political actors.[2] Further empirical studies should investigate possible effect mechanisms.

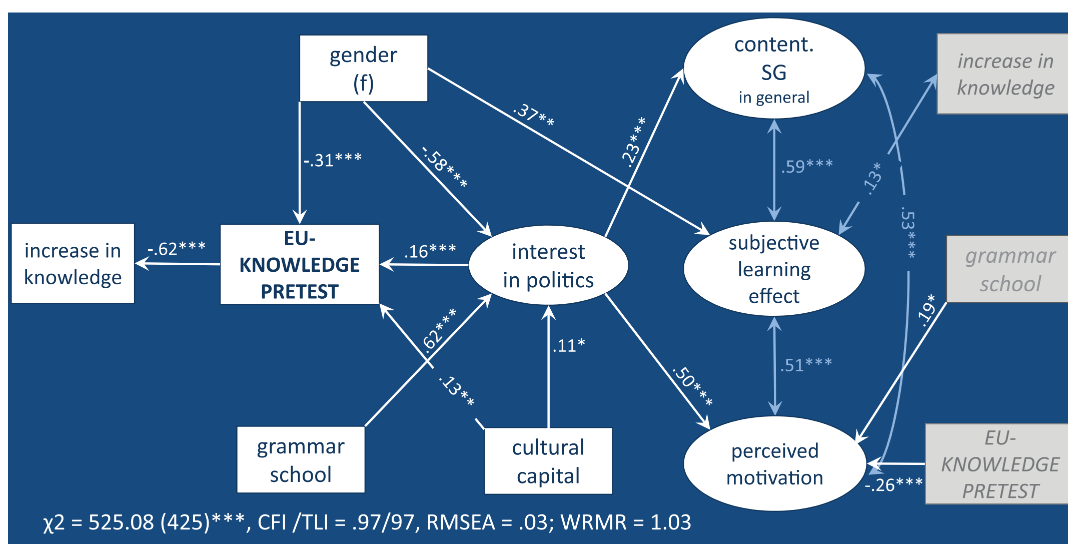
The mean values in table 2 underline that pupils rated the simulation game positively (M=3.08; SD=.31) and generally considered it to have large learning effects (M=3.09; SD=.47). When it comes to the questions of whether the game had increased their interest in politics and the EU and whether it had motivated them to further engage with the topic of EU and to participate in politics (third

[2] Cf. for example the following statements by pupils: "I thought it was more straightforward and more formal and not as social […] with argumentation and discussion, and that […] also showed me of course that you have to find compromises" (SA24). " […] just in terms of the number of people who are sitting there, there have to be really big compromises, they have to come to an agreement, and I wasn't really aware that it is sometimes really difficult to agree on something (CA13)". " […] I would never have thought that so many people come together, from so many different countries too […] that they are the ones who deal with it. I thought there were just a few better-known personalities, to be honest" (MU22). "Before I wondered what the EU has to do with citizens […] but through the fact that these elections take place, by the citizens, and they can also help determine the seats the parties get, it has become clear to me that we can actually help decide a small part of it, and it was actually quite important for me to find that out, because I used to be of the opinion that the EU had very little to do with us" (SR11).

dimension of game evaluation), there was a medium level of agreement (M=2.49) which varied more strongly across interviewees (SD=.66).

Multiple regressions and structural equations (cf. figure 3) demonstrate that pupils who initially were more interested in politics rate the simulation game overall more positively than their politically less interested peers did. In addition, pupils who initially had more interest in politics state significantly more motivation by the game to continue to engage with the EU and to participate in politics.

Fig. 3 *Latent structural equation of pupils' assessment of the simulation game (including political interest and socio-demographic background variables)*



In order to test whether politically uninterested pupils` assessment of the game is only relatively lower or actually negative, three interest types were generated by means of a latent class analysis (see table 3). Type 1 consists of pupils with very little interest in politics (M=1.33; SD=.24), pupils belonging to type 2 display medium interest in politics (M=2.32; SD=.29) while type 3 consists of pupils who are rather strongly interested in politics (M=3.24; SD=.35). Only 36 pupils belong to the politically uninterested type 1, of which relatively more of the sample`s girls than boys. The politically interested type 3 contains a higher percentage of the sample`s male than female students. While students` political interest grows with the amount of their family`s cultural capital (proxy indicator: books at home), type 1 contains relatively more pupils form vocational schools, and type 3 relatively more pupils from Gymnasium (high school).

Table 3: *Latent Class Analysis: Political Interest Types (Composition and Assessment of Simulation Game)*

Political Interest Types	**Assessment of SG: overall**	**Assessment of SG: learning effect**	**Assessment of SG: motivation/ pol. engagement**
low interest	2.98 (.29)	2.96 (.48)	2.01 (.59)
medium interest	3.07 (.29)	3.10 (.45)	2.46 (.58)
high interest	3.11 (.32)	3.11 (.50)	2.66 (.68)

	Political Interest Types*		
	Type 1 (n=36) low interest	**Type 2** (n=141) medium interest	**Type 3** (n=131) high interest
political interest (pretest)	1.33 (.24)	2.32 (.29)	3.24 (.35)
gender (female)**	17.6 %	51.0 %	31.4 %
gender (male)**	6.2 %	41.1 %	52.7 %
age	16.92 (1.66)	16.58 (1.24)	16.89 (2.61)
cultural capital	4.36 (1.25)	4.69 (1.25)	4.96 (1.19)

* LCA Fit Values: relatively lowest BIC, Entropy value = .88, medium LCA probability = .93-.98
** all percentages in one **line** sum up to **100**%.

Comparisons of the assessment of the simulation game by the three interest classes (see table 3) show that pupils with a strong prior political interest (type 3) do indeed rate the game most positively (M=3.11; SD=.32); but they also display that the markedly *un*interested learners (type 1) rate the game positively, too (M=2.98; SD=.29). Pupils uninterested in politics also state that they experienced an increase in learning (M=2.96; SD=.48). However, this group rather doesn`t confirm an increase in motivation to continue to concern themselves with the EU or to engage in politics (M=2.01; SD=59). At the same time, a detailed analysis of the mean values of the dispositions measured both before and after the game demonstrates the greatest changes in EU-related political efficacy (both internal and external) and objective EU knowledge for the least politically interested type (see table 4). Thus, students with very low interest in politics decidedly profited from participating in the simulation game, significantly reducing the gap in political knowledge, motivations and attitudes as compared to their classmates.

Table 4 *EU-related Political Efficacy and Knowledge for Interest Types, Pre- and Posttest (M, SD)*

EU-related dispostions	Political Interest Types		
	Type 1 (n=36) low interest	Type 2 (n=141) medium interest	Type 3 (n=131) high interest
ext. efficacy PRETEST	2.21 (.50)	2.44 (.54)	2.34 (.51)
ext. efficacy POSTTEST	2.54 (.51)	2.61 (.44)	2.56 (.50)
int. efficacy PRETEST	1.43 (.52)	2.12 (.57)	2.81 (.56)
int. efficacy POSTTEST	1.93 (.49)	2.33 (.55)	2.87 (.56)
subj. knowledge PRETEST	2.25 (.57)	2.64 (.46)	3.00 (.47)
subj. knowledge POSTTEST	2.72 (.47)	2.93 (.33)	3.19 (.40)
obj. knowledge gain	3.33 (4.20)	1.66 (4.49)	1.18 (4.27)
obj. knowledge PRETEST	12.25 (3.53)	14.24 (4.44)	15.01 (4.41)
obj. knowledge POSTTEST	15.44 (3.58)	15.99 (3.31)	16.20 (3.69)

Outlook

Drawing on studies by Werner Patzelt (1998, 2003), Helmar Schöne (2016) assumes that certain misconceptions contribute to a loss of citizens' trust in their political institutions, especially party-state institutions (parliament and government). Using group discussions, he demonstrated that it is quite common even for students in teacher training specialising in politics to be fed up with political processes ("*prozessverdrossen*") (cf. Schöne, 2011). He identifies a lack of "appreciation for the interplay between political dispute and the search for compromise" (Schöne, 2017). In order to promote understanding of how politics is done, Schöne draws on micro-politics in recommending that civic education should focus more on political actors' perspectives as well as procedures of political conflict and consensus building. For this, he considers simulation games and political field trips to be promising didactic approaches.

The results of the present empirical study underline the potential of simulation games to help pupils "understand parliaments from the inside" (Schöne, 2017). They confirm the hypothesis that simulation games can contribute to overcoming problems peculiar to teaching about the European Union, including a perceived lack of relevance to everyday life and perceived hyper-complexity. Pupils` satisfaction with the simulation game is largely independent of the socio-demographic background variables captured (with the exception that girls rate it more positively), while the growth in knowledge about the EU does not vary systematically when prior knowledge is controlled for.

Along with knowledge on the EU, important motivational orientations such as internal political efficacy are fostered by participation in the game. Learners' EU attitudes overall tend to become more positive, with changes in the perception of the EU's relevance to everyday life and the EU's responsiveness in particular. Perceptions of responsiveness change mainly in pupils who had a low prior opinion; in these cases, the change is extraordinarily pronounced. Presumably, the simulation game reduces these pupils' prejudices while their adopting a role increased identification with members of the European Parliament. Still, the game did not cause pupils to be euphoric about EU.

While pupils with lower political interest before the game give it a less enthusiastic rating than their politically more interested peers, their evaluation is still positive overall: thus, even very politically uninterested learners on average did enjoy the simulation game and state to have gained a better understanding of how the EU and politics in general function. Moreover, the group of politically very uninterested students demonstrates the largest changes (all towards values that are higher resp. more positive) in political dispositions such as EU knowledge, internal EU-related political efficacy, external EU-related political efficacy, interest in EU and willingness to participate in politics.

Thus, even in view of the scant time resources available in civics lessons, it does make sense to implement short simulation games in schools. Cooperation with extra-curricular partners specialising in the subject and methodology seems to offer great potential in that regard, since teachers might lack experience, competencies and perhaps the courage to implement simulation games successfully in class. At the same time, since pupils uninterested in politics probably would not have participated in the game as a voluntary extra-curricular school activity, it makes sense to integrate simulation games into the regular civics curriculum.

The survey method chosen for this study seems promising, both in terms of the collection of pupils' subjective assessment of the simulation game and measuring changes in relevant latent constructs. Further research is required: on the one hand, the sample size should be increased or replication studies should be undertaken, on the other hand follow-up data need to be collected (with at least a third point of measurement) in order to assess the long-term effects of simulation games. It would be useful to have not only a control group without intervention (such data is currently being collected and under examination), but also a third group receiving only brief content input by planpolitik while not participating in the game itself. Interviews with pupils or teachers can re-examine the results of the questionnaire. Furthermore, new survey instruments are required for political judgment and (especially communicative) action competencies in order to investigate their development, too. Ultimately, teachers` competencies need to be examined as a prerequisite of simulation games' successful implementation.

Finally, it must be stressed that the aim of this chapter is not to hold up simulation games as an educational silver bullet; successful civics lessons certainly require the interplay of a variety of approaches and methods (on political excursions in the context of teaching about the EU, see e.g. Weber, 2014). Furthermore, tackling the subject of the European Union is a process involving many steps; sustained development of understanding requires several attempts and repeated engagement with the object of study. This implies that it is not ideal to wait until the more cognitively advanced sixth form level to examine the complex topic of the EU; rather it should be introduced early on, ideally already at primary school while paying appropriate attention to the process dimension of politics. The results of a recent study as part of the Jean Monnet Project PEP[3] demonstrate that, contrary to widespread doubts, simulation games can also be an appropriate approach to teaching about (European) politics at primary school.

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[3] Jean Monnet Project "Simulation Games for Action-Oriented Teaching on the EU in Primary Schools" (PEP; see www.pep.uni-goettingen.de). Along with qualitative interviews, the empirical study contains a pre, post and follow-up survey of ca. 300 fourth-year pupils supported by questionnaires. The results are highly promising, showing longer-term effects especially for knowledge on the EU, internal political efficacy, attitudes towards EU and the children's general interest in politics (cf. Oberle & Leunig, forthcoming-a).

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