Pursuing a Common Goal: How School Principals and After-school Directors Perceive Professional Culture of Collaboration

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Abstract: Using quantitative data from school principals (SPs) and after-school program directors (ASDs) in 37 primary schools and after-school programs (ASPs) in Switzerland, this study examines the Perceived Professional Culture of Collaboration (PPCoC) as an aspect of school culture and professionalism of educational staff. The group comparisons confirm that the ASDs and SPs significantly differ on how they rate the PPCoC, even if they belong to the same school context. However, this study did not find significant group differences on the goals which the two leaders associate with the development of the ASP. Regression analyses indicate that having written guidelines focused on collaboration is the strongest predictor of a positive rating of the PPCoC for both leaders. PPCoC ratings for ASDs were additionally linked to their individual goals towards ASPs. Finally, this study points out that organizational attributes and individual goals are connected to the development of a shared attitude towards collaboration (PPCoC) as an important aspect of the quantity and quality of ASP development, as a means to define the goals and professionalize ASP practice.

Keywords: Professionalism, After-School Programs, Collaboration, Collective Attitudes, Organizational Development, School Culture

Introduction

Together with an orientation towards innovation, planning and goals, strong leadership and a positive working climate, collaboration is an important aspect of an institution's organizational culture and professionalism (Bonsen, 2005; Kamski, 2011; Rollett & Holtappels, 2010; Sachs, 2003). For extended learning and after-school programs (ASPs), collaboration with the school is crucial for two main reasons: First, to ensure the quantity of the ASP, since schools are an important actor for promoting the benefit of ASPs. Second, collaboration is considered an aspect of ASP quality (Holtappels, Lossen, Spillebeen, & Tillmann, 2011; Holtappels & Rollett, 2009; Maag Merki, 2015; Speck, Olk, & Stimpel, 2011).

Collaboration between teachers is a characteristic of the "new transformative professionalism" (Sachs, 2003), a basis for school development and a result of continuous reflection and exchange between educational professionals (Berkenmeyer,

Järvinen, Otto, & Bos, 2011; Maag Merki, 2015). The notion of a "professional culture" is not only directed towards individual improvement of staff members' competences, but also toward jointly and collaboratively designing a mutual practice within an institution where professional exchange and reflection may take place. From a multi-professional perspective, collaboration between ASP staff and teachers is influenced by their respective professional background and socialization (Breuer & Reh, 2010; Maag Merki, 2015; Speck, Olk, & Stimpel, 2011).

To date, many studies have focused on the content, frequency and intensity of the mutual exchange in the educational context from an individual point of view (Steinert & Maag Merki, 2009). The findings suggest that the benefit of collaboration for educational professionals that comes from extending their professional knowledge and building a professional identity largely depends on individual perceptions and attitudes (Berkenmeyer et al., 2011; Holtappels et al., 2011; Speck, Olk, & Stimpel 2011).

Contrary to this approach, we focus in the following paper on the perceived professional culture of collaboration (PPCoC) between the school and the ASP as jointly shared norms of daily work (Maag Merki, 2015). Similar to the study by Speck et al. (2011) we look at *professional culture,* referring to a shared practice which is to some extent detached from individual perceptions. On the basis of recent research we assume that three main aspects influence the PPCoC: The school context (1), shared norms and values in the school organization (2) and individual attitudes of leaders towards collaboration (3). Collaboration is influenced by common goals for both the school and ASP as expressed in school's written guidelines as well as factors of the school context (Holtappels et al., 2011; Holtappels & Rollett, 2009; Maag Merki, 2015).

In the last decade, there has been a surge in the development of ASPs in Switzerland in the aftermath of a federal law passed in 2008 (EDK & SODK, 2008). In many cases, the ASPs are organized as separate institutions with an after-school program director (ASD) and a team of after-school staff with diverse educational backgrounds and training (Jutzi, Schüpbach, & Thomann, 2013; Maag Merki, 2015). Even though the school and the ASP are two distinctive institutions, they share the same population (the students and parents), the same structure of the school context, and have to collaborate with the same local educational board (ERZBE, 2009). In Swiss ASPs, the staff is responsible for a heterogeneous group of students who spend their lunch breaks and afternoons in the setting. Since the time the students spend in the ASP is divided up into short modules (about 1-1.5 hours), and the participation is voluntary with parents liable to pay costs and fees on a sliding scale, the ASP often bridges school and home (learning) culture (Schüpbach, Jutzi, & Thomann, 2012).

Even though ASPs are an increasing phenomenon in the Swiss school context, their organizational role in the educational system has neither yet been clearly defined nor studied. Whereas research points out the importance of enriching afternoon care for school-aged students (Schüpbach, 2010), in practice, ASPs are often implemented as a reaction to social needs for reliable institutionalized care in the community (Aeberli & Binder, 2005). This is why the current nationwide study "Educare-TaSe", funded by the Swiss National Science Foundation, aims at investigat-

ing the practices, goals, guidelines and forms of collaboration between the schools and ASPs in 53 Swiss school settings.

To summarize, we assume that the PPCoC can be influenced by aspects of the school culture and climate, particularly those aspects which enhance or develop individual competences and daily practices directed towards reaching common goals. We argue that the realized level of PPCoC represents the matching of professional cultures between school and ASP leaders and may therefore be an important basis for further development of collaborative practices and ASPs in general.

Review of Literature

Professional Culture of Collaboration

In educational contexts, collaboration is often considered a means to improve instructional quality and promote school improvement (Gräsel, Fussangel, & Pröbstel, 2006). Nevertheless, recent research points out that in many schools, collaboration between teachers can be seen as guiding idea, but seldom as an important part of daily practice (Speck et al., 2011). In teacher collaboration research in German-speaking countries, several different approaches to measure and operationalize collaboration have been tested, such as hierarchical models accounting for different *contents, frequencies and levels of collaboration* (Bonsen, 2005; Maag Merki, 2009; Maag Merki, Kunz, Werner, & Luder, 2010; Steinert et al., 2006). Studies on teacher collaboration furthermore find that collaboration is mainly developed on a case- or student-specific level and less often for common planning purposes (Bonsen, 2005; Maag Merki et al., 2010; Roos & Wandeler, 2012; Steinert et al., 2006). Other research emphasizes that the *intensity of* (Dizinger, Fussangel, & Böhm-Kasper, 2011; Tillmann & Rollett, 2011) as well as the *attitudes* towards collaboration are important for the realized collaborative practice (Maag Merki et al., 2010). For example, Roos and Wandeler (2012) point out that in Swiss schools, the perceived *effectiveness of collaboration* depends on clear role distribution and task development, and on a positive team culture.

Therefore, several studies highlight that collaboration should be measured as a multidimensional, complex construct which is influenced by structures and processes of the school context (Maag Merki, 2009; Steinert & Maag Merki, 2009). In this article, we argue that collaborative practice can only be successful if the *professional culture of collaboration* is based on a common theory of change (Connell & Kubisch, 1998) for the ASP. This implies consensus between the school and the ASP on aspects of program evaluation, quality and effectiveness such as: the intended outcome of the activities; strategies on how those might be achieved; and which contextual factors have to be considered to establish effective programs. We argue that if goals are well-matched, as are guidelines and orientations towards the development of ASPs between the school and after-school leaders, it is more likely that the professional culture of collaboration will be perceived more positively.

Goals of Effective Professional Collaboration

The qualitative studies by Schüpbach et al. (2012) and Jutzi et al. (2013) in 10 ASPs in Switzerland found that even though there are differences between the ASPs considering the attitudes towards collaboration, the school principals (SPs) and ASDs mostly agree on the conditions that promote positive collaborative practices. Conditions on the structural-, and interpersonal levels and aspects concerning the team itself emerged from the systematic analysis of the qualitative data. On the structural level, setting clear goals, having written guidelines and providing opportunities for collaboration in formal or informal settings play an important role. Written concepts help to entrench a positive attitude and culture of collaboration in the school and clarify the institutional role of the ASP (Böttcher, Maykus, Altermann, & Liesegang, 2011; Kamski, 2011; Maag Merki, 2015; Tillmann & Rollett, 2011). Nevertheless, the analysis of school and ASP guidelines, qualitative materials and observations by Speck et al. (2011) shows that there is a considerable discrepancy between the aspirations expressed in written guidelines and the statements of the practitioners. The authors highlight three aspects of how to set the stage for positive culture of collaboration: Align written concepts to realistic implementations (1), communicate expectations towards the benefit and meaning of collaboration (2)**,** balance autonomy and participation/collegiality (3).

## A Theoretical Model: Dimensions Affecting the PPCoC

In line with Rollett and Holtappels (2010), we focus on two (of the three) different dimensions affecting the collaboration between ASPs and the school: The *goals and guidelines,* and the *organizational culture*. According to their theoretical and empirical model, setting common goals which focus on designing and shaping a context-dependent common culture of learning, and a joint approach to pedagogical action between school and ASP has positive effects on the school organization and climate. Furthermore, collaborative practice is one of the most important aspects of the organizational culture, innovative practice, and quality (Steinert & Maag Merki, 2009). Therefore, we investigate the effect of common goal orientation and clear guideline communication on the development of the PPCoC.

We focus on the intermediate level of the shared practice of collaboration rather than on the intensity of collaboration. In line with the concept of professional collaboration (Gajda & Koliba, 2008; Speck et al., 2011), we assume that the collaborative practice highly correlates with PPCoC. The collective or group, therefore, carries different values and assigns social roles to the participants which leads to the development of a commonly shared organizational reality (Buske, 2014).

In the present study, we consider only the self-reported collective attitudes of school and after-school leaders, and take them as representative of the attitudes in their team. We focus on leaders because collaboration research shows that school principals and after-school program directors play an important role for developing a positive school climate of change and while implementing collaborative practices

(Bonsen, 2005; Gajda & Koliba, 2008; Maag Merki, 2015; Steinert & Maag Merki, 2009). Figure 1 shows the theoretical connection between the diff erent variables. The main goal of this study is to analyze aspects that are associated with the PPCoC between SP and ASD of the same school. First, we look at structural aspects of the school context (heterogeneity of the school, size of the team and the reasons for the development of the ASP). Second, on an intermediate, organizational level, we look at written guidelines for the development of ASPs and how they correlate with the shared innovative practices among ASPs and schools. And third, we investigate the eff ect of the individual goals of leaders on the development on their own perception of the professional culture of collaboration.

Figure 1. Factors influencing the PPCoC adapted from Holtappels et al. (2011) and Rollett and Holtappels (2010)
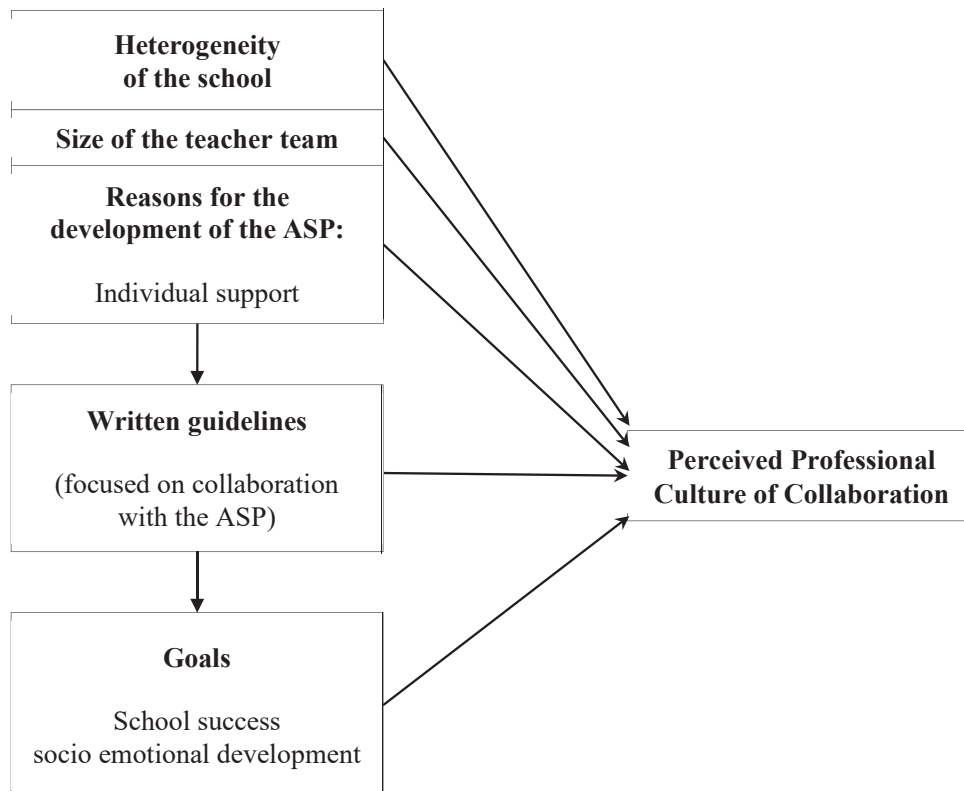
Hypotheses

In alignment with the theoretical model, the testing and examining of the hypotheses follow a sequential logic:

H1: The PPCoC can be operationalized by items which represent *intentionality and positive connotation of collaboration* such as effectiveness, structure, consciousness and perceived outcome of the collaborative activity.

H2: Since the PPCoC is measured as *an attitude and shared collective approach* towards professional exchange within schools, the ASD and SP will display similar levels of PPCoC.

H3: There are no systematic group differences between the *goals* the ASD and SP associated with the development of ASPs.

H4: Having a positive attitude towards the PPCoC is influenced by aspects of the school context, school organization and the individual goals of the SP and ASD.

Methods

Design and Sample

The data is taken from a quantitative survey funded by the Swiss National Science Foundation administered in 53 primary schools and ASPs from 13 German-speaking cantons of Switzerland in 2014. The stratified sample represents different approaches to after-school programming and the different Cantons have been used as strata. The sample only includes ASPs designed as open-attendance programs and which are offered at least 3 times a week. Fifteen schools and ASPs from the main sample had to be excluded, either because significant data from one or the other leader was missing, or because their role was not clearly defined. For example, SPs and ASDs shared responsibilities or in some cases, the SP was responsible for the school and ASP. This resulted in a subsample of 37 primary schools and ASPs from 12 German-speaking cantons of Switzerland, consisting of 5 male and 32 female ASDs and 20 male and 17 female SPs. For each SP, there is one directly matched ASD present in the sample. Even though this strict matching lead to a reduction of the sample size, we can analyze a constant set of schools in all models. Furthermore, we assume that due to the clear definition, the pairs of leaders are more comparable. This proceeding is justified since we would like to draw conclusions for the school as a whole in this study. For the analysis of the PPCoC, a sample of 74 SPs and ASDs could be considered, whereas the predictor analyses were conducted on school level (N=37 schools).

Instruments and Scales

Dependent variable PPCoC. Since there currently does not exist a widely accepted way to measure the PPCoC, we developed a scale which combines aspects labeled as "intensity of collaboration", "quality of collaboration" and "effectiveness of collaboration" (Bonsen, 2005; Roos & Wandeler, 2012). The different items have been adapted verbally to the ASP context. The seven items describe how the respondents perceive and value the collaborative practice as part of their institutional culture. Their attitude and approach to collaboration is represented by items such as: *Consciously making contact[1], informing the team about the modes of collaboration, perceived success and reward (gain) from collaboration, the structure of making contact, intensity of collaboration and the definition of roles and tasks during the collaborative process*. We assume that people are more likely to engage in collaborative efforts if such efforts are valued by the team *and* the principals.

Predictors. We are looking at the influence of two different sets of predictors. While the first three independent variables are only rated by the SP and apply to the school and the ASP as a whole, the second set of predictors is based on scales that are rated by the SP and the ASD separately. Those scales are then used in the pair analyses to compare the attitudes of the SP and ASD within the same school.

School level predictors. As predictors of PPCoC, we considered three objective variables which are only rated by the SP for the whole school – including instruction and the extracurricular activities (ASP).

The SPs reported the *sizes of the teacher teams*, representing the size of the school. Several studies and theoretical assumptions (Holtappels et al., 2011; Maag Merki, 2009) suggest that larger teams might hinder effective collaboration practices, because contact occurs less frequently and naturally. In the sample, about 50% of the schools have relatively large teams between 25 and 63 teachers. Furthermore, the standard deviation of this measure (SD=17.34) is very large compared to the mean (M=24.27).

Second, we asked the SPs to rate the *heterogeneity of the school*. This is operationalized by the percentage of second language learners present in the school. This operationalization is based on the assumption that second language learners and children from different cultural backgrounds attend the ASPs more frequently (Marcus, Nemitz, & Spieß, 2013). To provide appropriate support for those children, collaboration between the school and the ASP is desirable. According to the Federal Statistical Office (BFS, 2015), schools where more than 30% of the student population are second language learners are classified as very culturally heterogeneous. Even

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1   Translated from German for the PPCoC (formulated for SPs): *SLKoop_Schule03:* „Die Zusammenarbeit mit den Mitarbeitenden des Tagesschulangebots bezüglich einzelner SuS gelingt uns gut"; *SLKoop_Schule04:* „Wir versuchen ganz bewusst, bei Schwierigkeiten mit einzelnen SuS den Kontakt mit den Mitarbeitenden des Tagesschulangebots aufzunehmen"; *SLKoop_Schule05*: „Alle Mitarbeitenden der Schule werden über die bei uns vorherrschenden Formen der Zusammenarbeit mit den Mitarbeitenden des Tagesschulangebots informiert"; *SLKoop_Schule06:* „Die schülerspezifische Zusammenarbeit mit den Mitarbeitenden des Tagesschulangebots ist bereichernd für uns"; *SLKoop_Schule09:* „Es gibt einen klaren Ablauf für die Kontaktaufnahme mit den Mitarbeitenden des Tagesschulangebots, wenn eine Zusammenarbeit notwendig ist"; *SLKoop_Schule10:* „Wir arbeiten mit den Mitarbeitenden des Tagesschulangebots intensiv bezüglich einzelner SuS zusammen"; *SLKoop_Schule11:* „Die Aufgaben- und Rollenverteilung in der Zusammenarbeit mit den Mitarbeitenden des Tagesschulangebots ist klar und angemessen"

though the mean in the sample is close to a low heterogeneity, the frequency analysis shows, that 16 of the SPs report a high percentage of more than 30% second language learners, whereas 14 SPs rate the heterogeneity as mediocre and only 7 as lower than 15%.

In the study by Holtappels & Rollett (2010), the authors asked the SPs which *reasons motivated the development* of an ASP in the local school or community. From the four items describing socio-pedagogical reasons for the development of ASPs, we chose to use only two: *Improvement of educational opportunities*[2] and *improvement of individualized support.* Both these items refer to reasons which are directly linked to the individual and academic support of students and are less likely to reflect other, more economically oriented reasons for the development of the ASP. Also, we might assume that if the reasons for the development of the ASP are focused on student learning, there might also be a stronger motivation to develop collaboration between the school and the ASD. The descriptive statistics show that the mean is rather low, indicating that the SPs often do not agree with the statement that the ASP has been developed to support student learning (M=1.19; SD=.75). Nevertheless, the high standard deviation suggests that the differences between the SPs might be worth considering.

Individually rated predictors. As a second set of variables, we looked at predictors which were rated by both the SP and the ASD on a collective and individual level. Using these predictors, we can directly compare the ratings of the leaders within the same school context.

According to Rollett and Holtappels (2010), having *written guidelines* in the school that focus on the collaboration between school and ASP correlates with the overall quality of collaborative practice. We used three different items (adapted from Rollett and Holtappels (2010)) to gauge the extent to which guidelines focus on the systematic connection between school and ASP, the collaboration and exchange between teachers and ASP staff. Whereas the SP rated how collaboration is treated in the school`s written guidelines, the ASD did the same for the ASP`s written guidelines. Those guidelines might to some extent overlap in content. The descriptive statistics of the comparison between SP and ASD show that the ASD slightly more often report that collaboration with the school is declared in the ASP`s guidelines (M=1.68; SD=.80) than the SPs do for the schools` (M=1.05; SD=.79).

Lastly, we assessed the *goals of SPs and ASDs* concerning ASPs in general. In contrast to Holtappels and Rollett (2009), the items were reformulated to focus on the individual attitudes of the leaders and only a part of the scale has been included. The factor analysis confirmed two one-dimensional scales of the goals: goals of improving the *student`s academic success* (learning motivation, support of students with special needs, increasing academic performance and avoiding boredom with school) and the *socio emotional development of the students* (supporting talented students, social learning, health consciousness and well-being, focusing on psychosocial difficulties). Comparing the means of both goal orientations shows that the SP as well as the ASD report that they widely consider goals concerning socio-emotional support

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2   German Translation of the items measuring the reasons which motivated the development of ASPs: *SLBeweggr03*: „Verbesserung der Bildungschancen"; *SLBeweggr04*: „Verbesserung der individuellen Förderung"

in the ASP (M_{SP}=2.14; M_{ASD}=2.28), whereas they say that they only to some degree pursue goals focused on school success of the students (M_{SP}=1.15; M_{ASD}=1.18). Standard deviations are stable and low across groups and between the two goals (about .60), suggesting that differences between groups and schools are low. Nevertheless, the ASDs rate the focus on clear set goals slightly higher than the SPs.

Analysis

To address the previously mentioned hypotheses, we use multivariate hierarchical regression as well as t-tests to account for group differences (SP and ASD) and intraclass correlations to investigate whether or not PPCoC is a collective construct within the schools. However, that work is predicated on the one-dimensionality and internal consistency of the new scale called "Perceived Professional Culture of Collaboration", which has to be analyzed by reliability measures, and exploratory (EFA) and confirmatory factor analyses (CFA). For the CFA, we used Mplus 7.4 (Mutèn & Mutèn 2010) and all other analyses have been computed in SPSS.

Table 1. Scale parameters: Predictor variables

	Name of the Variables & Scales	# of items	Scaling	N	M	SD	α
One rating per school (by SP)	Heterogeneity of the school	1	1 (<15%) 2 (16–30%) 3 (>30%)	37	1.24	.76	-
	Size of the teacher team	1	metric	37	24.27	17.34	-
	Reasons for development: Individual support	2	0–4	37	1.19	.75	.74
Individually rated by SP and ASD	Perceived Professional Culture of Collaboration (PPCoP)	7	0–4	74	2.57	.98	.89
	Written guidelines	3	0–4	74	1.37	.85	.88
	Goals: School success	4	0–4	74	1.17	.58	.79
	Goals: Socio-emotional development	5	0–4	74	2.21	.54	.77

Results

Exploratory and Confirmatory Factor Analyses of the PPCoC Scale

In an exploratory and confirmatory factor analysis, we validated the structures of the measured construct of PPCoC[3]. The exploratory factor analysis (varimax rotation) proved that the scale is suitable for factor analysis (KMO and Bartlett = .000***), is a one-dimensional construct, and displays high internal consistency and good reliability measures (Cronbach`s α = .89). The model as specified in Mplus has been fitted considering the whole sample of SPs and ASDs (n=74). The standardized estimates show that there exists an acceptable positive correlation between all 7 items and the latent construct of PPCoC with factor loadings above .60. When allowing correlations between the error terms of certain items (PPCoC_03 with _09 and PPCoC_05 with _11), this default model shows a good fit, except for the RMSEA, which is rather high (RMSEA=.077; CFI=.98; TLI=.97; SRMR=.037). This result is confirmed in correlation analysis on an item level. The correlations between the individual items are relatively strong (all above .45) and significant for all items. The items with correlated error terms also correlate significantly with an r=.49 (PPCOC_03 & _09) and r=.40 (PPCOC_05 & _11).

PPCoC as a Shared Collective Approach of a School

Furthermore, we examined whether PPCoC represents a shared collective approach of a school. Since ASD an SP pairs are nested within schools, we expect them to share a similar level of PPCoC (H2). Overall, the two groups of educational leaders differ in their ratings of the PPCoC (t=2.63(36), p$\leq$.01; M=.48; SD=1.13; d=.39). The ASDs rate the PPCoC considerably higher than the SPs (M_{SP}=2.32; M_{ASD}=2.81), whereas they show comparable standard deviations (SD_{SP}=.94; SD_{ASD}=.98).

Assuming that PPCoC represents a collective construct for each school, rated by both the ASD and the SP, we calculated an intraclass-correlation (one-way random, absolute agreement, N=37). With an intraclass correlation of ρ =.28 (p$\leq$.05), ratings by ASD and SP correlate significantly. However, the intraclass correlation is far below the recommended value of ρ = .70 (Wirtz, 2014), which would indicate a good interrater agreement. Therefore, the notion of PPCoC as a shared collective approach of a school could not be confirmed.

The low intraclass correlation indicates that there is a considerable discrepancy concerning the ratings also among pairs, not just between the groups of ASDs and SPs as a whole.

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3   Threshold criteria (Hu & Bentler, 1999)

Table 2. Intraclass Correlation Coefficients: Differences of PPCoC
within schools

	Intraclass Correlation	F-Test with true value 0			
		value	df1	df2	*p*
Single measures	.28	1.90	36	36	0.03

Note: One-way random effects model; intraclass correlation coefficients using an absolute definition; N (pairs)= 37.

Group Differences for the Individual Goals for ASPs Between ASD and SP

Since the ASD and SP often work together during the development of the ASP concept and structure we assume that there are no systematic differences in the goals associated with ASPs between the SP and ASD (H3). Furthermore, we assume that a matching goal orientation of the leaders has a positive effect on how they perceive the culture of collaboration. The paired t-tests for the focus on academic goals and goals concerning the socio emotional development of ASPs confirm that the differences between the two leader groups are not significant (t=.23(36); t=1.37(36)). This t-test compares the means of the pairs where the mean of the SP rating is subtracted from the mean of the ASD rating. Therefore, for both goal orientation measures, the positive results show that the rating of the ASD is slightly (yet not significantly) higher than the one of the SP.

Table 3. Paired t-tests for the two leader groups (ASD – SP)

		M	SD	t	df	*p*
Pair 1	ASD – SP goal: Academic success	.03	.87	.23	36	.82
Pair 2	ASD – SP goal: Socioemotional development	.14	.63	1.37	36	.18

Note: N (pairs)= 37.

Influence of Contextual, Organizational and Individual Aspects on PPCoC

Since the SPs and ASDs show different perceptions of the culture of collaboration in their school, we attempt to further account for these different response behaviors by computing hierarchical regression analyses. In two different approaches, we will firstly consider how *structural aspects* of the school organization as a whole influence the SP's rating of the PPCoC. In a second approach we investigate how the *goals set in the written guidelines* of the school and the ASP respectively influence the rating of the PPCoC. In this second approach we can compare two different models for the SPs and the ASDs. Furthermore, we will also look at whether an *individual focus on specific goals* has a different influence on the SP's and ASD's PPCoC.

Approach 1: Structural aspects and SP's rating of PPCoC. In the multiple hierarchical regression model[4], predicting the PPCoC rating of the SP, we entered the different variables blockwise, testing two different models. On the basis of cited literature, we assumed that the size of the teacher team as well as the percentage of second language learners are contextual factors which might influence the SPs rating of the PPCoC. Secondly, we entered the motivation in the community for development of the ASP into the regression model. If we look at table 4, only the reasons for development on the intermediate level of the school organization in model 2 have a significant effect on the PPCoC (β=.39, p≤.05), accounting for 14% of the variance (p≤.05).

Table 4. Variables measured on school level: Variables which the SP rates for the school on the individual PPCoC of the SP

Predictors	Model 1 β (SE)	Model 2 β (SE)
School heterogeneity	-.02(.21)	-.13(.21)
Teacher	.14(.01)	.12(.01)
Reasons for development: Individual support		.39*(.21)
R^2	.02	.16
ΔR^2	.02	.14*

Note: N (only school principals) = 37; *p≤.05. **p≤.01 ***p≤.001.

This second model suggests that if the SPs report individual support for the students as an important reason for developing ASP in the community, they also rate the PPCoC higher.

Approach 2: Influence of written guidelines and individual goals of SP and ASD. In this approach, we are going to present two different tables (see table 5 & 6) where we specifically focus on either the SP or ASD ratings.

The hierarchical regression model regarding SP's ratings of PPCoC[5] is shown in table 5. In Model 1, collaboration as an aspect in the written guidelines of the school was entered as predictor, explaining 15% of the variance in the SP's ratings of PPCoC: The more collaboration is focused in the written guidelines of the school, the higher the SPs also rate the PPCoC (β =.38, p≤.05). In the second model, individual goals of the SPs with regard to ASPs were entered as predictors. Both goals which are either focused on school success or on socio emotional learning failed to show a significant effect, while the effect of written guidelines was still significant (β =.42, p≤.05).

4　The model (only SP variables) meets the assumptions regarding auto-correlation (Durbin-Watson =1.87, while 2 stands for no auto correlation) and multicollinearity (Variance inflation factor (VIF) is between 1.01 and 1.11 (cut-off >5)). Condition index is below 6.

5　The model meets the assumptions regarding auto correlation (Durbin-Watson = 1.79 while 2 stands for no auto-correlation) and multicollinearity (Variance inflation factor (VIF) is between 1.00 and 1.10 (cut-off >5)). Condition index is below 12.

Table 5. Hierarchical regression for the influence of organizational and individual level predictors on the dependent variable PPCoC of the SP

Predictors	Model 1 β (SE)	Model 2 β (SE)
Collaboration in the written guidelines of the school	.38*(.19)	.42*(.19)
SP goals school success		-.28(.25)
SP goals socio-emotional development		-.02(.28)
R²	.15	.22
ΔR²	.15*	.08

Note: N (only school principals) = 37; *p≤.05. **p≤.01 ***p≤.001.

The same hierarchical regression model was calculated with regard to ASD's ratings of PPCoC[6] (table 6) to explore whether the effects of the predictors depend on the profession or role of the leader in the school (SP vs. ASD). Again, collaboration as an aspect in the written guidelines of the school was entered as predictor, explaining 25% of the variance in the ASD's ratings of PPCoC. The more collaboration is focused in the written guidelines of the after-school program, the higher the ASDs also rate the PPCoC (β =.50, p≤.01). In the second model, individual goals of the ASDs regarding ASPs were entered as predictors, explaining an additional 25% of the variance in PPCoC. Contrary to the regression models for SPs, goals which are either focused on school success (β =.38, p≤.05) or on socio-emotional learning (β =-.49, p≤.01) showed a significant effect: ASD's ratings of PPCoC were higher, if they reported a stronger focus on school success and a smaller focus on socio emotional learning. Written guidelines still showed a significant effect (β =.51, p≤.001), adding to a total of 49% explained variance in PPCoC, as rated by ASDs.

Table 6. Hierarchical regression for the influence of organizational and individual level predictors on the dependent variable PPCoC of the ASD

Predictors	Model 1 β (SE)	Model 2 β (SE)
Collaboration in the written guidelines of the ASP	.50**(.18)	-.51***(.17)
ASD goals school success		.38(.27)*
ASD goals socio-emotional development		-.49(.27)**
R²	.25	.49
ΔR²	.25**	.25**

*Note: N (only after-school directors) = 37; *p≤.05. **p≤.01 ***≤.001.*

Overall we might conclude from the regression analyses that firstly the strongest effect was found for the written guidelines on collaboration between the school and

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6   The model meets the assumptions regarding auto correlation (Durbin-Watson = 2.34 while 2 stands for no auto-correlation) and multicollinearity (Variance inflation factor (VIF) is between 1.03 and 1.06 (cut-off >5)). Condition index below 14

the ASP. Also, we can see that the model explains more variance for the ASDs than the SPs, with individual goals explaining additional variance in PPCoC.

Discussion

In this article we tested four hypotheses regarding the development of a professional culture of collaboration (PPCoC) between school and after-school programs (ASPs).

H1: Operationalizing PPCoC

Contrary to prior research, collaboration is operationalized as collective shared culture rated by the leading or managing persons on the actions of their staff. The exploratory and conformational factor analyses confirm our first hypothesis. The PPCoC is a latent factor that is defined by seven items adapted from research on teacher collaboration which show positive results for reliability and validity. PPCoC is a consistent, one-dimensional scale focusing on intentionality and positive connotation of collaboration. The construct reflects how the leaders rate the professional culture within their team and cannot be interpreted as a measure of realized collaborative practice.

These result are aligned to prior research, since the items have been adapted from recent studies which highlight that collaboration is a complex phenomenon, has to be analyzed from different perspectives, and does not only depend on the intensity and frequency (Maag Merki, 2009; Maag Merki et al., 2010). Shared collective attitudes toward collaboration – which we measured with PPCoC – also might be correlated more highly with other shared aspects of collective cultural practice, such as working climate and innovative practice and detached from individual preferences. Therefore, we might assume that a high PPCoC could also be related to a higher quality of collaboration and therefore the intentional quality enrichment of the ASP. Nevertheless, the concept of "good" or "exertive" collaboration between school and ASP must be further investigated to draw conclusions for the relationship between collaboration, innovation and quality in ASPs.

H2: PPCoC as a Feature of Shared School Culture

Contrary to our hypothesis, the paired t-tests highlight that there exist small but significant differences between the ratings of the SP and ASD on PPCoC. Furthermore, the low intraclass correlation coefficient could not confirm the notion of PPCoC as a shared collective concept between SPs and ASDs. Even though the two leaders of the same school seem to have a similar tendency on the rating of PPCoC, the intraclass correlations show that there is no strong correlation between the attitudes to PPCoC of the two leaders within the same school. This might be interpreted as an indication that the SP and the ASD have other values and perceptions on PPCoC and how collaborative actions are transferred into practice.

This finding is interesting, since we assumed that the two leaders are rating and operating in the same organizational context and therefore would report a similar PPCoC. Therefore, we have to reject the second hypothesis. This finding is consistent with prior research on the different perceptions of collaboration between teachers and ASP staff (Arnold, 2009; Beher et al., 2007). Maag Merki (2015) observes that there is currently no theoretical model which accounts for the complexity of the actor constellations in the collaboration between ASPs and schools (ibid. p. 91).

H3: Common Goal Orientation of the SP and ASD

For the individual goals, the t-tests show that the SPs and ASDs do not significantly differ on their goals for the ASP. Nevertheless, the ASDs report slightly more often that their focus and aim for the ASP is to promote student learning in school but also regarding student's socio emotional development. This indicates that not only the SPs, but also the ASDs value the ASP as an institution which fosters academic enrichment, and also fulfills a role as a bridging institution with a positive, familiar atmosphere where children learn and spend their leisure time.

H4: Influence of Contextual, Organizational and Individual Aspects on PPCoC

Whether or not the aspects on different levels of influence have an effect on the development of PPCoC has been analyzed by multiple hierarchical regressions. Contrary to prior research, we find that the size of the team and heterogeneity of the school as contextual aspects of the school have no significant effect on the PPCoC of the SP (Holtappels et al., 2011). On the contextual level, only the reasons for the development of the ASP in the community, which are focused on promoting individual learning, are significantly associated with how the SPs rate the PPCoC. This might be interpreted as an indication that if the SPs think that providing individual support for students is an important goal of the development of the ASP, they also are more open to informing their team about collaboration with the ASP, they more often report that they consciously make contact with the ASP and rate the expected success and reward from collaboration higher (which are all items of PPCoC).

For the SP and the ASD, having written guidelines which focus on collaboration is a strong predictor of how they rate the PPCoC. This indicates for both leaders that if they have already discussed collaboration in the team and have a clear vision for collaboration, this is positively associated with their rating of the PPCoC. Therefore, we can only partially confirm this hypothesis (H4) insofar that different levels of the organization and individuals do influence the PPCoC.

Moreover, there exist important differences between the ASDs and SPs aligned with the regression models considering their individual goals. Focusing on the goal that the ASP should be aiming at supporting school success might have a positive influence on the rating of the PPCoC for the ASDs. On the other hand, ASDs who think that socio emotional development is an important aspect of ASPs show lower ratings in the PPCoC. This negative effect might be interpreted as an indication that

focusing on goals which are not associated with academic achievement might be a reason to focus less on the collaboration with the school and rather strengthen the autonomy of the ASP. For SPs, neither their goals regarding school success nor socio emotional development are linked to their ratings of PPCoC.

In sum, there exist considerable differences in the PPCoC rating between the leader groups, especially within the same school. This supports the assumption that the ASPs are distinctive educational institutions with their own culture and PPCoC in the larger scheme of the school. Establishing written guidelines with a focus on collaboration showed the strongest link to PPCoC rated by both SPs and ASDs. Regarding individual goals, the results are less straightforward. On the basis of these findings we might suggest that the ASDs take action and formulate guidelines and communicate goals, and actively seek out the collaboration with the school. This has to be subject of further studies which should account for the development of the PPCoC and how this is connected to individual and collective aspects and characteristics.

When investigating collaboration, we have to consider the different institutional structures and differences in the professional scope of action between teachers and ASP staff as well as individual attitudes towards collaborative practice. Kremer, Maynard, Polanin, Vaughn, and Sarteschi (2015) argue in their meta-analysis that ASPs have to be explicit about their program goals, because "simply implementing after-school program with hopes that it will have positive impacts on a number of outcomes without building in a specific mechanism to impact those outcomes are likely to fail" (ibid, p. 630). To some extent, our results also suggest that from the perspective of the ASDs, collaboration with the school might be more desirable than for the SPs. Therefore, the ASDs, should be advised to take action and discuss collaborative action in their team to strengthen the collaborative culture. For the SPs, other factors than the goals and guidelines might come into play when they rate how they perceive the collaborative culture. Further and more detailed studies are needed to answer these questions and follow these processes more closely. Nevertheless, the school`s readiness to collaborate is an important aspect of the implemented practice.

Limitations and Future Research

Until now, the attitudes towards collaboration of two leaders in the same organizational context have not yet been studied. Given the small sample size of the study, some restrictions have to be considered in the interpretation of the findings. Therefore, the described scales and mechanisms should be explored in a larger sample, and the development of PPCoC over time should be considered. Nevertheless, the present paper points towards an interesting interplay between the organizational context of the school and individual and collective attitudes of the leaders as a starting point for future research.

Collaborative Practice as a Multidimensional Construct

The present as well as prior research points out that collaboration should be assessed as a multidimensional construct compiling of attitudes, anticipations, individual and collective perceptions and modes of action as well as the realized collaborative practice in the unique context of the educational setting. Further research might focus on how those aspects of collaboration interplay and how those correlations might describe a construct of effective and productive collaboration for daily practice between school and ASP. How, for example, does the content and topic of collaboration (homework, socio-emotional differences etc.) influence the PPCoC?

Collective Attitudes and Organizational Climate

Further research should focus on how aspects of the organizational context other than the ones measured here might influence the PPCoC – for example, ASP quality, working climate, innovative practice, or other aspects of shared collective attitudes. Buske (2014) for example argues that permanent social interaction might lead to the formation of social groups and therefore intensify collaboration over time. As shown in this article, the school culture and culture of the ASP as separate institutional contexts should be coming into focus when further investigating the collaboration between school and ASP. In this case it might be interesting to leave the leadership perspective and also investigate the attitudes of ASP staff.

Roles and Professional Concept of Leadership in ASPs

Since the present study highlights systematic differences in the ratings of ASDs and SPs, we might consider the ASDs as a new and independent profession which has to fulfill other tasks than the SPs. Interestingly, we found that if the ASDs focus on goals concerning the socio emotional for the ASP, a positive influence is not necessarily conferred on the PPCoC. Nevertheless, we might argue that goal conformity between the ASD and SP might lead to the development of a common theory of change and community of practice. Leadership practice, though, might significantly differ between the two contexts, which should be taken into account in future investigations.

In conclusion, leadership and collaboration in ASPs is a field of growing interest. Functional interchange between the two educational institutions is a precondition for providing a qualitatively enriching and quantitatively adequate extended education experience for children in modern society. From a governance perspective, the way SPs perceive ASPs sets the stage for productive collaborative practice. Therefore, especially in some cantons in Switzerland, the ASPs are developing as an important factor in the educational system, and they need find their role in the informal and formal context of educational practice.

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