

Challenges for Police Training after COVID-19:

Seeing the crisis as a chance

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Abstract

The COVID-19 pandemic has shown how vulnerable the world is and posed unprecedented challenges to almost every part of society including the police. While the scope of research within the police on the impact of COVID-19 has been on police officers and their stress levels, their mental health, demands, and coping resources as well as the potential impacts of police legitimacy, the impact on police training due to COVID-19 has been a minor topic of research. COVID-19 and its consequences on police training illustrate a lack of digital preparation, equipment, and infrastructure, as well as a multitude of other challenges, which lie ahead of the police training. Among them are a demographic change combined with a divergent family educational background of the future police recruits, a new generation of police recruits (Generation Z) linked to a necessary new style of leadership, and the possible damage of the police reputation because of popular cases related to extremism and racism (e.g., public loss of legitimacy and acceptance). Furthermore, continuous new challenges can be found in the daily police work (e.g., cybercrime, complexity of operations), which affect police training as well. Lastly, there is the question of how the police force is willing to face, manage, and overcome these challenges after the Covid-19 pandemic to be prepared for the future. The challenges and solution approach will primarily focus on Bavarian police training but can easily be transferred to almost any police training in Europe and even in some aspects to the German dual educational system.

Keywords: police training, challenges, digitalisation, COVID-19

Introduction

The COVID-19 pandemic has shaken the whole world to its foundations and has affected almost every part of society. Only two months after the outbreak of COVID 19 was confirmed worldwide in March 2020, United Nations Secretary-General Guterres (2020) declared that

the coronavirus disease was “the most challenging crisis we [the world] have faced since the Second World War”. Soon after, articles were published on the impact of COVID-19 on numerous aspects of public life (e.g., economy, education) including police work. While the focus of research within the police on the impact of COVID-19 has been on police officers and their stress levels, their mental health, demands, and coping re-

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sources (Frenkel et al., 2021; Stogner, Miller & McLean, 2020), as well as the potential impacts of police legitimacy (Jones, 2020), the impact on police training due to COVID-19 (e.g., Koerner & Staller, 2020) has been a minor topic of research. This circumstance is interesting, because even before COVID-19, the landscape of police training and education had been changing (Baylis & Matczak, 2019) and had been gaining more attention again (Bartkowiak-Théron, 2019). Reasons for this process of transformation of police training were challenges that were not as disastrous as the ones which the COVID-19 pandemic brought along, but those challenges were considered to be permanent and would affect significant aspects of police training and education and police work in general. Although COVID-19 caused negative effects of unparalleled magnitude (e.g. economy lockdown, school closures), some fields are thriving under the new circumstances (above all digitalisation). In addition, the times of pandemic crises required decision-making, which had to be quick, bold and sometimes unorthodox. Therefore, the article aims to identify the (future) key challenges for police training and outlines an outlook on current challenges that police training is going to face, based on the experiences and associated changes that were implemented in reaction to the pandemic but also for reasons beyond this particular challenge.

The Bavarian police training

The Bavarian police training has the ambition to be modern and to prepare police trainees in the best possible way (Polizei Bayern, 2020). Therefore, police training has to anticipate future challenges for police work, on the one hand, and prepare and equip itself for upcoming challenges, on the other hand. Before discussing and analysing the main future challenges, we will have to take a closer look at the principles of Bavarian police training.

In 2021, around 3.800 police trainees are attending the Bavarian police training at six different locations throughout Bavaria. The Bavarian police training consists of about 5.000 lessons (including two internship periods at local police stations) in two and a half years and is based on the three pillars: a) professional competence, b) action competence and c) social skills.

These different competences are represented by twenty subjects of great variety, including law (e.g., police

law, traffic law or penal law), practical training (e.g., weapon handling, self-defence, or administrative procedures) and personal/social skills (e.g., police ethics, political education and current affairs, or communication and conflict management). There are four main topics that will structure all lessons: patrol duty, traffic police work, crime fighting and working in a police station with a total of 32 interdisciplinary modular units that include 92 scenarios such as road traffic accidents, domestic violence or driving under influence. The idea behind those interdisciplinary modular units is to ensure that all police trainees achieve certainty in action and confidence in their own competences based on a) theoretical knowledge on one specific topic and b) simulation-based trainings to practise a standard course of action. Once they have completed police training, police trainees have various opportunities such as joining the uniformed police, the riot police or qualify for the higher education program (diploma course of the Bavarian police).

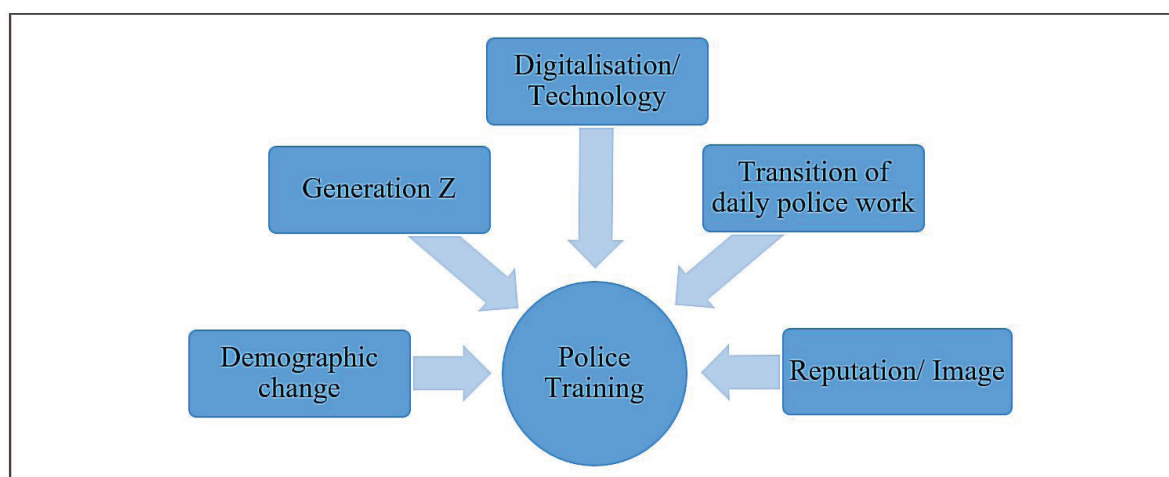
Challenges for police training

In recent years, the Bavarian police training has repeatedly been declared the most attractive employer for pupils by the Trendence institute (Bayerische Polizei, 2020). To stay attractive and get the best possible police trainees, the Bavarian police training has to permanently adapt its curriculum, its organisation as well as learning and practice methods. Therefore, the Bavarian police training should recognise and embrace the following five key challenges (see Figure 1). First, all five challenges will be described briefly. Secondly, the presumed consequences for police training of every challenge will be outlined. Thirdly, possible approaches to meet these challenges will be presented (some of those ideas are already implemented into the training programme).

Demographic change

One of the biggest challenges Europe has to face is the demographic change, i.e., the decline of its population² (England & Azzopardi-Muscat, 2017). Although a decline in population growth may not necessarily be a negative phenomenon in itself, as Bongaarts (2016) points out; nevertheless, it entails several challenges, e.g., the shrinking of the working-age population with

² Europe is the only region worldwide expecting their population to be in decline by 2050 (England & Azzopardi-Muscat, 2017; United Nation, 2019).

Figure 1: The five key challenges for Bavarian police training (Source: author's own illustration)

an ageing population at the same time. That means, on the one hand the population is becoming older, and, on the other hand the number of children and young people (aged 0-19) is projected to decrease (European Commission, 2020). Consequently, the decreasing number of potential applicants for police training will be a major challenge. Furthermore, Bavarian police has to compete with prestigious global companies such as BMW, Siemens, Adidas, Audi, as well as with Federal Police (Trendence, 2019). Chambers et al. (1998) stated already more than twenty years ago that there is a “war of talent”, which will intensify over the years. Nowadays, the world is in the midst of transitioning from *the old reality* to *the new reality* (cf. Beechler & Woodward, 2009; Landry, Schweyer & Whullans, 2018). That means, while in the past people needed companies and therefore had to accept their requirements and conditions (*old reality*), today (*new reality*) it is quite often the other way around. Companies often need people and therefore, they must accept the requirements and conditions of potential employees (e.g., work-life-balance, flexible work schedule, training facilities). Besides the fact that the general number of applicants for police training will decrease (see figure 2), meaning that the applicant-ratio³, respectively, will decrease, the academic level of the applicants will decline as well, or rather is already declining due to the smaller pool of qualified candidates. A team from one of the most renowned research institutes for education in Germany (Autoren-

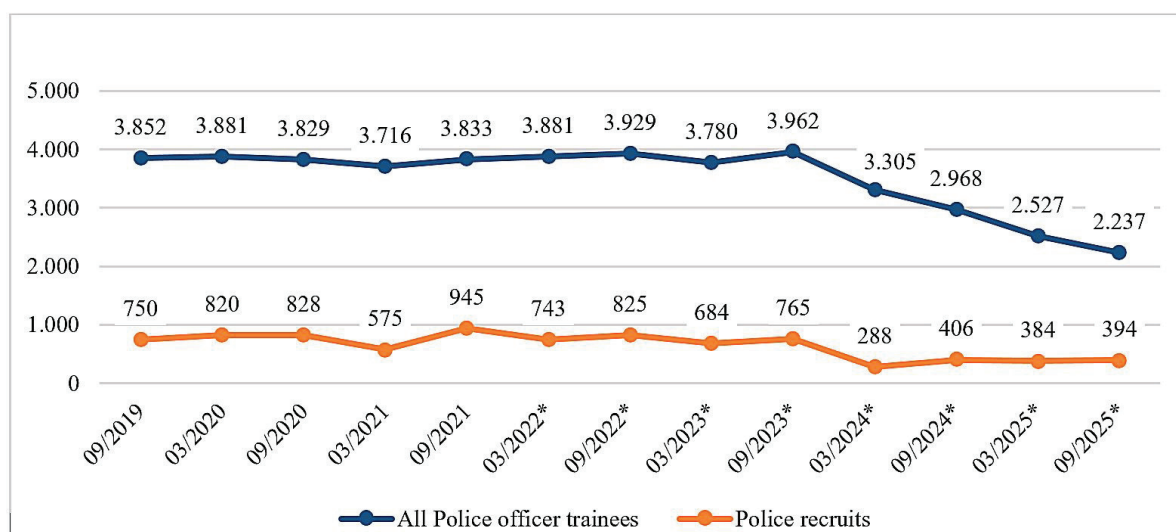
gruppe Bildungsberichterstattung, 2020) announced last year, that the number of graduates with higher education entrance qualification is stagnant or might even decrease. The same is to say for the general certificate of secondary education. Moreover, the number of school dropouts is increasing.

Furthermore, it is a fact that more than half of the adult population in Germany are obese (Statist, 2019) and the same trend can be seen among adolescents (Schienkiewitz et al., 2018). As a result will probably be some long-term effects on physical performance, especially since most children and adolescents were physically inactive during the COVID-19 pandemic (Ten Velde et al., 2021). These effects will be noticeable in police training as well. This is important to keep in mind, because physical fitness is a key part of police training and for the work as a police officer later on (Fuchs & Muff, 2021).

As pointed out before, the consequences of the demographic change (and there are more) will be quite challenging for police training. The following list shows how the Bavarian police training is trying to handle the difficult demographic circumstances in order to convince the best graduates from secondary school to join the police force:

- 40 special recruitment counsellors
- tailored social media content (twitter, facebook, instagram)
- internships are being offered grade 9 and higher
- career website

³ The number of applications is not only decreasing because of the demographic change, but also because of other factors, e.g., the current public image of the police (as will be mentioned later on). In the last years, the application-ratio was at an average of 8:1 (eight applicants for one apprenticeship training position), but for the recruitment in March 2022 there has already been an application-ratio drop of 6:1.

Figure 2: Actual and prognostic number of police trainees from 09/2019 until 09/2025 (own illustration)

- tailored advertising campaigns for potential young police officers (since 2013) and for IT-specialists (since 2018)
- video advertising running in over 40 cinemas and on YouTube

Although the Bavarian Police is already trying to win potential police officers in several different ways, the Bavarian police must try to convince more applicants with migration background, not only to be an adequate reflection of society, but also in regard of the multiple diverse communities. Additionally, the Bavarian Police should try to increase their percentage of female applicants (approx. 30% - 35%). Moreover, it might be helpful to revise and adapt the assessment test and its requirements regarding all test sections, namely German (language proficiency), basic skills (e.g., logical reasoning), sports skills, group discussion and an interview.

Generation Z

Very closely linked to the demographic change is the issue of Generation⁴ Z. The term *Generation Z* (Gen Z) classifies people who were born between 1995 and 2010 (Seemiller & Grace, 2017), succeeding Generation Y (Millennials) and followed by Generation Alpha (McCrindle, 2014). According to this definition, the oldest member of Generation Z is 26 years old and the youngest is, or is turning, 11 years old in 2021. From this follows that the Generation Z are and will be the majority amongst police trainees for the next 10 to 15 years

and therefore their needs and demands will affect police training significantly. To gain an understanding of Generation Z, this chapter provides an overview of their learning characteristics. Gen Z is the first generation who grew up in a fully digitalised world and whose world was shaped by the internet (Seemiller & Grace, 2016). Furthermore, computers, smartphones, social media and constant connectivity are part of their lifestyle (Moore, Jones & Frazier, 2017). Because of this, Prensky (2001) introduced the term “Digital Natives⁵” to illustrate the natural way of interaction with technology and the fluent use of it. Along with the label “Digital Natives”, there is the prevailing assumption that Gen Z possesses inherent tech- and web-savviness (Hargittai, 2010). In contrary to this assumption, a variety of research studies (e.g., Jones & Cross, 2009; Kennedy & Fox, 2013; Margaryan, Littlejohn, & Vojt, 2011) show that members of Gen Z (and also Gen Y) are far less proficient in using technology than generally assumed. Although they use some tools more actively, their use of technology and knowledge is limited in terms of range and nature (Margaryan & Littlejohn, 2008). Therefore, it can be stated,

“...though learners in this generation have only experienced a digital connected world, they are not capable of dealing with modern technologies in the way which is often ascribed to them” (Kirschner & De Bruyckere, 2017, p.140).

4 Generation is defined “as groups of individuals born during the same time period who experience a similar cultural context and, in turn, create the culture” (Campbell et al., 2015, p. 324).

5 Originally, Prensky (2001) generated the term “Digital Natives” for the Millennials (Generation Y), hence Gen Z is called “Digital Natives 2.0” as well.

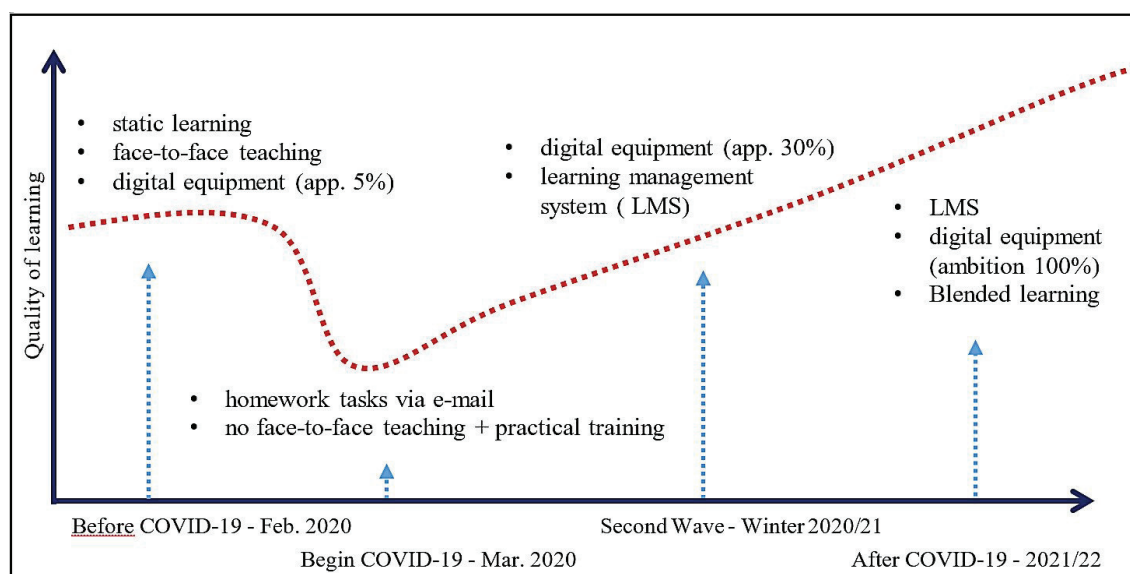
Nonetheless, the widespread use of smartphones, computers and unlimited access to the internet has a major impact on learning styles (Moore, Jones & Frazier, 2017) in combination with new learning environments. Seemiller & Grace (2016) describe the learning style of Gen Z as students who prefer independent and self-paced learning. Even though they (generally) prefer intrapersonal (solitary) learning by means of multiple online opportunities (e.g., completing an online module, or watching an instructional video), they are still open to collaborative group work. Furthermore, they see their teacher or instructor, respectively, as a learning facilitator who helps them developing relevant and hands-on skills and provides constant feedback. Other characteristics of Gen Z are that they collect and synthesise information superficially rather than by checking a single source of validation (Dede, 2005), they are said to have a short attention span (Shatto & Erwin, 2016) and a (non-) ability to multitask (Amez & Baert, 2020; Kirschner & De Bruyckere, 2017). Above all, their potential copy-and-paste attitude (Comas, Sureda, & Urbina, 2006) seems to be dangerous because it could result in a tendency to plagiarism, and, maybe even more importantly, in trusting and using wrong information (fake news) due to their less distinctive competence to evaluate information critically, as recently shown in a report by the OECD (2021). The study from Hasebrink, Hölzig & Wunderlich (2021) shows that more than half of the adolescents between 14-17 years do not feel the need to inform themselves on news and current events using journalistic content, but instead they use non-journalistic information sources (e.g., influencer) to shape their own opinion. However, it is important to keep in mind that the description of a generation (in this case Gen Z) is only a generalisation of distinct characteristics in relation to selected traits (e.g., learning style, behaviour) and that they are not valid for every member of Gen Z.

As mentioned before, Gen Z is driven by a different learning style and social practices than previous generations; they embrace new opportunities brought to them by digitalisation and changing learning environments. Therefore, police training and its teachers must adapt their teaching styles and forms. The first changes have already been made in Bavarian police training, a process that was accelerated by the COVID-19 pandemic. According to the expectations and needs of the police trainees, the first classrooms were equipped with digital interactive Whiteboards (IWBs) and digital devices (tablet computer, smartphones) were provided

for the trainees as well as for the teaching staff in December 2019. Due to the new technical opportunities, but above all due to the pandemic, a transition from traditional training to remote learning had begun to take place. Along with the digital equipment, new kinds of multimodal learning (auditive and visual learning) have emerged in response to the needs of the *new* police trainees. However, even though police training has started to adapt its learning environment and teaching style, there is still great room for development. In addition to greater variety of teaching and learning methods, e.g., the concept of blended learning or flipped classroom, respectively, and the incorporation of intrapersonal learning into class and group work (Semiller & Grace, 2016), there is a need for new learning styles (mobile learning, video-based learning). Furthermore, it is assumed that above all the implementation of gamification will help to motivate the police trainees and result in high commitment, the facilitation of deep understanding and enhanced cognitive and skill-based outcomes, as several studies have shown (Beavis, 2017; Wilson et al., 2009). Verifying the truth of information and news is a core task of police work. Therefore, it is and will be important to support police trainees to extract answers from multiple sources of information on the one hand, and to strengthen their political knowledge and competence to evaluate information critically, on the other (Bråten, Braasch, & Salmerón, 2020), as the Bavarian police training does by including subjects like political education and current affairs into their curriculum. All these changes are only possible if teachers and trainers will be prepared and equipped for those tasks. Therefore, extensive trainings are needed in terms of teaching style (edutainment, use of digital devices), methodological variety and the way feedback and learning opportunities are given to police trainees.

Digitalisation

Unlike most of the other challenges, digitalisation will not only pose a major challenge to police training in the future, but it already has been an important topic for the last five to ten years. The COVID-19 pandemic has shown that the Bavarian police training was not ready to face this challenge adequately in the beginning. Hence, the quality of learning in police training suffered noticeably in the beginning of the pandemic, as shown in figure 3. However, the COVID-19 pandemic helped to fuel the engine of the digital transformational process, because it showed where the strengths and weaknesses of police training lie in regard to digital-

Figure 3: Development of learning quality after introducing digital devices and LMS during COVID-19 (own illustration)

isation. In the further course of the pandemic, it became apparent that the Bavarian police training was able to take the pandemic as a chance because the Bavarian riot police⁶ already had a vision and a ready to implement concept on how to digitise police training. The basic aim of digitising police training is to use the potential of learners and teachers, as well as learning content and settings to increase both the effectiveness and efficiency of police training. The four key factors that have contributed to using COVID-19 as a chance in regard to digitalisation of police training are outlined below.

The basis of digitalisation of Bavarian police training is a media-educational concept (*key factor 1*), which contains and connects all-important aspects of digitalisation. It aims to make learning in a highly complex police environment as effective and sustainable as possible and focuses on the objectives of the basic police training and further education. This means that the digitalisation of police training should help young police trainees to develop their skills from the beginning of police training and, in the long run, prepare them for their daily work at a police station. Therefore, digital devices and technical equipment (*key factor 2*) are indispensable. Already in December 2019, one project unit was equipped with IWBs in every classroom and in May 2020, all members of the teaching staff and each police trainee of this particular unit received a tablet-comput-

er (convertible) and a smartphone. Besides the fact that the pandemic made it obvious, that adequate digital equipment is necessary for a modern police training, internal evaluations conducted by the author showed as well that using digital devices had a positive impact on the performances of the police trainees from the project unit (Fuchs, 2020). The police trainees of the project unit stated that the lessons were more varied, the interdisciplinary understanding was better and on an emotional and motivational level they were more committed to learning. Moreover, the digital devices do not only serve as a learning medium and provide new didactic-methodical elements for lesson planning (e.g., blended learning, gamification), but above all, they represent an operational tool. Therefore, the handling is taught in simulation-based practice classes as well because tablet-computers as well as smartphones are the same devices that the police trainees will have to work with when they are on duty once they have graduated. Additionally, these technologically skilled graduates can act as multipliers for their colleagues who have less experience with these digital devices. Therefore, Bavarian police training will equip all 160 classrooms with IWBs by the end of 2021 and all police teachers and police trainees will receive personalised tablet-computers and smartphones by March 2022. While digital devices are obviously essential for modern police training, there is also the need for an interactive learning platform/ learning management system (LMS) (*key factor 3*). In general, an LMS can be described as a "framework that handles all aspects of the learning

⁶ In Bavaria, the riot police is responsible for police training and further education, besides their task as a riot unit.

process" (Watson & Watson, 2007, p.28), including following functionalities (Coates, James & Baldwin, 2005):

- asynchronous and synchronous communication (e.g., email, chat, forum)
- content development and delivery in different formats (e.g., documents, video, links)
- formative and summative assessment (e.g., multiple-choice testing, submission)
- class and user management (e.g., course registration, administration).

Although, the Bavarian police has had its own LMS within the police network since 2013, until the COVID-19 pandemic it was used only sporadically for some online courses for advanced training. Furthermore, the Bavarian police used a web-based LMS for their training programme for top athletes (70-80 police trainees), who complete their police training in five instead of two and a half years. When all training facilities were closed for several weeks in March 2020, a working web-based LMS had to be implemented within two weeks to provide the learning materials for the police trainees. Apart from optimising the web-based LMS, the LMS within the police network was refined and extended in the months past and was officially (re-)launched in March 2021. Now the Bavarian police training is using its intranet-based LMS, which provides

- standardised learning material (e.g., lecture notes, slide shows, homework assignments, video tutorials)
- a database that provides learning material for all teachers at every training location
- interactive learning objects, e.g., modular units, multiple choice tests, polls
- support for teachers, students, and administrators

Once all police units are equipped with digital devices (roll-out is starting this year), the Bavarian police training will be able to share non-confidential as well as confidential learning and teaching material. This will be a huge gain, since currently there are many restrictions regarding confidential material due to web security issues. As a result, the Bavarian police training will be able to provide their complete training content via LMS for in-class teaching as well as distance and hybrid learning models. In combination with the digital devices the LMS should generate both an active and interdisciplinary teaching and learning style regarding remote learning, but, above all, also for in-class lessons or practical trainings. Moreover, an interactive LMS is expected to help strengthen police trainees' self-learning skills, which will lay the foundation for efficient

self-management and lifelong learning throughout their police careers

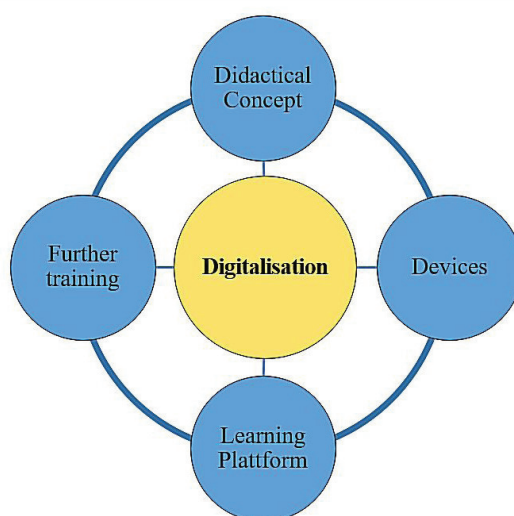
As Kendal & Stacey (2002) point out, the way teachers approach the use of digital devices has major consequences for the effectiveness of its use in the classroom. Accordingly, the lack of training options for the teaching staff is one of the key reasons, why digital devices have not reached their full potential in classrooms (Camilleri & Camilleri, 2017; Oigara & Ferguson, 2020) yet. Therefore, further training and constant coaching for teachers and instructors, but also for police trainees, are *key factor 4* for a successful digital transformation of police training. That means, firstly, that every police trainee is being introduced to the use of digital devices and on learning with digital media. Secondly, every member of the teaching staff is getting the opportunity to attend a basic media educational course on the use of the LMS, in addition to a training on the use of the digital devices (IWB, tablet-computer). By June 2021, more than 20 (online) training courses have already been offered, with a participation of approx. 200 police teachers and trainers.

The digital transformation of police training is an ongoing process (e.g., revising of the teaching material, developing new learning formats) and new technologies constantly offer additional tools and functionalities to support teachers and learners; still, one should keep in mind that the focus should always be on the different needs and requirements of each individual (Stephanidis et al., 2019). Therefore, it is not enough to buy digital devices and provide learning tools and systems. Instead, all these four key factors must consider and equally developed from the beginning and throughout the process, to make the digital transformation of police training as well as in any other form of education successful (figure 4).

Transition of daily police work

The 21st century has so far seen many changes in crime and security environment all over the world. Apart from long-known external threats such as terrorism and mass movements of refugees as a result of persecution, violence, poverty or climate change (Ransley & Mazerolle, 2009), *new* forms of crimes have emerged in the last ten to twenty years, such as environmental crime, cybercrime (Matthews, 2020) and CBRN⁷-threats (Benolli, Guidotti & Bisogni, 2021). Above all, the cases of cybercrime have been constantly increasing in the last

⁷ CBRN = Chemical, Biological, Radiological and Nuclear

Figure 4: The four key factors in a successful digitisation process (own illustration)

years, as figure 4 shows (Federal Criminal Police Office, 2015⁸, 2016, 2017, 2018, 2019, 2020, 2021). Since there is still no standard definition of cybercrime, the classification of cybercrime by Grabosky (2007) appears helpful for a basic understanding: cybercrime is roughly classified in a) the computer is used as the instrument of crime, and b) the computer is the target of the crime.

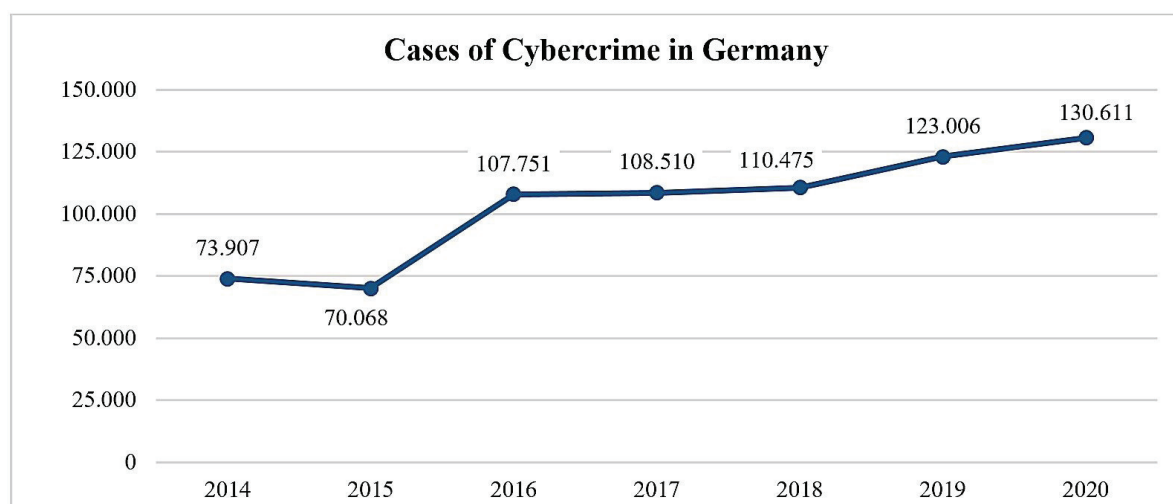
Furthermore, the police nowadays have to play a greater role in dealing with entrenched social problems and anti-social behaviour (Ransley & Mazerolle, 2009). Even though the traditional forms of police work (e.g., street crime, property crime, drug crime and violence) are still the focus of police training, the rise of technology has changed the range of police work (Ransley & Mazerolle, 2009). Accordingly, police training has to be aware of these changes and has to consider them. Hereafter it will be shown how the Bavarian police training adapts its training content to the new challenges. However, it must be noted that regular police training will not be able to fully cover all new technologies such as artificial intelligence, big data applications or information and surveillance technologies and, respectively, all new security issues and new forms of crime that have emerged. Nevertheless, police training must educate police trainees in those fields and lay the foundation for an understanding of information and communication technology (ICT) that they can build on once they have graduated. Therefore, the Bavarian police adjusts

its curriculum every six months (according to the experiences of the police force) and implements current topics, if necessary. Over the last two years, several new topics were added, including new technologies such as “body-cams”, “drones” and new elements of cybercrime. As described in chapter 2, the concept of the Bavarian police training is interdisciplinary and modular, so that new topics such as commodities fraud, cyber bullying or ATM tampering are part of a specific modular unit and are taught through different subjects. For example, the unit “Cybercrime – Commodities Fraud and Cyber Bullying” is taught in theory in criminology and law as well as in IT classes, on the one hand, and practised in simulation-based training on the other⁹. The Bavarian police is convinced that this type of teaching and learning represents the most promising approach on teaching practical and theoretical skills at the same time. Furthermore, from this year on, trainees must prove their capability in using their digital devices when faced with new technologies and crime topics during their final exam. However, the Bavarian police training needs to embed particular digital competence areas even more firmly into the curriculum (cf. Vuorikari et al., 2016), such as:

- information and data literacy (e.g., searching, managing and evaluating data),
- communication and collaboration (e.g., interacting and collaborating through digital technologies)

8 Data has been collected with the PKS system (Police Crime Statistics) since 2014 therefore previous cybercrime data is not comparable. (Federal Criminal Police Office, 2015).

9 To be able to react in time for changes concerning crimes and technologies, the Bavarian police training has several departments that design and implement sample cases for simulation-based training.

Figure 5: Cases of Cybercrime in Germany from 2014 to 2020 (own illustration)

- digital content creation (integrating digital content, copyright, programming),
- cybersecurity (e.g., protecting devices as well as personal data and privacy) and
- (digital) problem solving (solving technical problems, identifying digital competence gaps).

In addition to keeping the training curriculum up to date concerning new crime topics, there are new skills required not only for police trainees, but for the teaching staff as well. In order to meet the needs of police personnel regarding skills and knowledge necessary to deal effectively with current (cyber) crime issues, the Bavarian centre for continuing education offers several courses e.g., in the field of cybercrime and other new types of crime. To respond to permanent changes in daily police work in general, the centre conducts 850 seminars per year. Of course, COVID-19 forced them to switch to online seminars as well; therefore, there is an opportunity now to permanently expand their range, offering blended learning or e-learning units, in order to enable members of the teaching staff to continuously read up on new crime topics on their own.

Reputation and public image of police

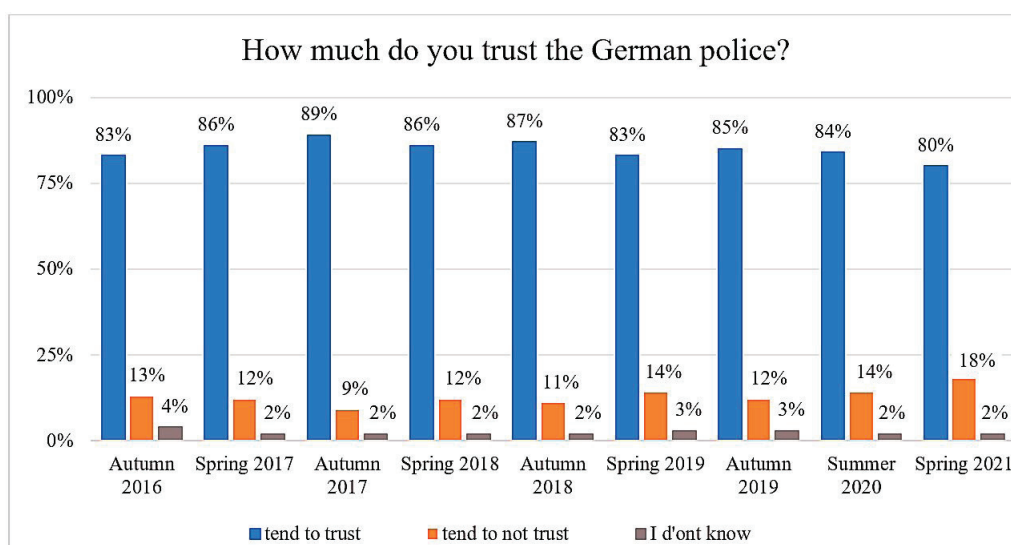
The previous four challenges are external factors to whose effects police training has to react and adapt in order to guarantee a modern police training and to remain an attractive employer. The challenge that lies in the reputation and public image of the police force, on the other hand, is largely affected by themselves. Nevertheless, the public's perception of law-enforcement agencies, especially police organisations, has significant

influence not only on the popularity of the police as an institution, but also on the attractiveness of the police as an employer and therefore on the recruiting for new trainees (Wilson et al., 2010). However, even though, the public image of the police force can have such powerful effects, it is important to keep in mind that the public's perception is shaped through three different narratives (Alpert, Dunham & Stroschne, (2015):

- First of all, by the media and entertainment industry (internationally: e.g., Bad Boys, CSI, Law & Order, and nationally: e.g. Tatort, Polizeiruf 110 and also documentaries),
- secondly, by print media, social networks, and news programs (news media) and
- thirdly, by the police itself through social media and its own media appearance.

However, in recent months several cases of police violence as well as cases of extremism and racism in police forces worldwide have widely damaged the image and the reputation of the police in general. Especially the deaths of George Floyd, Breonna Taylor and Jacob Blake in the USA (Williams & Toldson 2020), of Cédric Chouviat in France (BBC, 2020), who all died at the hands of police officers, the beating of Michel Zecler in France (Onishi, 2020), or the discovery of chat groups with right-wing extremist content in German police units, which became public in 2020 (Sehl, 2021), have defined the narrative on the German police in recent times. There has been an ongoing discussion on whether there is structural racism inside the German police force (Abdul-Rahman et al., 2020). According to a survey done by the European Commission (2021a),

Figure 6: Trust-level of the German police from autumn 2016 until spring 2021 (own illustration based from the European Commission, 2021a)



80% of the population in Germany still trust the German police. However, compared to the last five years, the level of trust in the German police has reached an all-time low in 2021¹⁰ (European Commission, 2021a), as shown in Figure 5. Taking this downwards trend into consideration, some high-ranking police officers like the President of the Federal Criminal Police Office is worrying about a general loss of trust in the police and therefore a loss of legitimacy and acceptance by the public (Norddeutscher Rundfunk, 2020).

To regain the trust of the people, two substantial adjustments are necessary (cf. Hiller, 2020):

A) Rethinking police work and the public image associated with it. That means, firstly, that especially high-ranking police officers from all law-enforcement agencies and politicians must be willing to analyse systemic problems, approach structural change and communicate results and findings proactively, and secondly, stop the *code of silence*.

B) Setting *new* priorities in police training, above all in the area of personality development, in order to change the culture of the police from the inside.

The following part describes shortly, what actions are being taken by the Bavarian police training to strengthen the personality development based on liberal-dem-

ocratic values and ends in an outlook on additional actions that should be taken in the future. As described in Chapter 2, Bavarian police training is based on three pillars: professional competence, action competence and social skills. Above all, subjects such as political education and current affairs, communication and conflict management as well as police ethics – those three subjects combined account for 12.7% of all teaching units and are part of the social skills aspect of the training – have aim to support and shape the personal development of the young police trainees, for example in terms of democratic resilience¹¹. More precisely, the Bavarian police training teaches an understanding and an awareness of following topics:

- democratic and human rights-oriented attitudes and behaviour
- the problem areas of racism, anti-Semitism and hate crime
- the importance of structured exchange between police training, police practice and civil society in order to combat right-wing extremism and racism via project days and cross-cultural exchanges, e.g., with the Jewish or Muslim community.

Furthermore, in January 2020 all Bavarian police trainees (N = 2.602) were asked about their understanding of democracy (Muff & Fuchs, 2020). The results were

¹⁰ Comparing the different countries in the EURO-area (73%) and in the non-Euro area (57%) the trust-level in the German police remains widely above average (European Commission, 2021b).

¹¹ The Bavarian police training understands democratic resilience as “the ability of an individual, (...) a community [and an organisation] to withstand, cope, adapt (...) from stresses and shocks such as violence [and] conflict (...) without compromising long-term development (European Commission, 2016, p.2).

widely positive and corroborate the results of Krott, Krott & Zeitner (2018) that police training has a positive impact on the decreasing xenophobic attitudes.

In addition to the efforts taken regarding the police trainees' democratic resilience, from this year on, the personnel in charge as well as all members of the teaching staff must also take part in further training courses on topics such as extremism and racism, conducted by the Head of the Bavarian Riot police.

In the near future, it would be desirable to make police training more diverse in terms of the personnel in charge to a) impact the culture of the organisation positively and b) serve as role models, on the one hand, and show that everyone has equal opportunity to climb the ranks within the police service, on the other hand.

Beyond that, potential recruits still consider the Bavarian police as being backward and hierarchical (Trendence, 2019). Therefore, it could be helpful, as Wilson et al. (2010) point out, to reduce unnecessary bureaucracy (continuing the way of digitalisation), to communicate goals effectively and to be fair and transparent in all aspects of policy. This includes openness to and cooperation with research institutions even on sensitive issues such as racism and ethnic profiling.

Conclusion

The COVID-19-pandemic will hopefully be a once-in-a-lifetime event and puts almost everything into perspective, including structures, mechanisms, and rules within police training. After the training facilities had to close down, there was an immense pressure to keep the police training running as well as possible. Suddenly, police trainees were asked to use their private computers and laptops, work outside the training facilities and participate in online classes and video conferences. Police teachers now had to work from home, creating videos and modular learning units on a learning management system and discover new ways of teaching (blended learning). Moreover, final exams had to be rescheduled and new rules were set temporarily to facilitate exams under pandemic conditions. It is undeniable that COVID-19 had disastrous consequences

in many ways. Nevertheless, COVID-19 also showed that a lot of things and changes are possible, e.g., *digitalisation*, if we are open – or rather have to be open – to adapt. For example, before COVID-19, there was the general attitude that blended learning was unsuitable for police education and training. After the experiences during the COVID-19 pandemic, several police institutions consider blended learning as a necessary and useful future teaching method in police education (Belur & Bentall, 2021; Himberg, 2021). Therefore, it would be a greatly missed opportunity, if they did not hold on to those innovations once the pandemic is over, even though some things will have to be adapted anew.

As pointed out in this article, police training will have to face enormous challenges over the next years that will affect it in several ways. Some changes have already begun (e.g., digitalisation) and some are yet to come but will have long-lasting effects (e.g., demographic change). Although COVID-19 has challenged Bavarian police training in an unprecedented way and certainly had some negative impact (e.g., no practical training and face-to-face-teaching), they have proven that they can successfully cope with this situation and even thrive from it.

Beyond that, there is a need to monitor empirically change and its impact on police training. Therefore, the Bavarian police training aims to start a research project in September 2021 in cooperation with the Ludwig Maximilian University of Munich. The project will run for three years and will focus on the impact of digitalisation on police training regarding the three levels of analysis in social sciences: micro level, meso level and macro level. In addition, the Bavarian police training is planning an evaluation of the assessment test for new recruits.

Eventually, if the Bavarian Police are willing to make use of the positive side effects of the pandemic and stay flexible, open-minded, and courageous, when it comes to quick and sometimes unorthodox decision-making, there should be a fair chance that they will master future challenges and live up to their own ambitions – forming a police force that is well equipped to face any challenge, providing modern and contemporary police training, offering interesting career options, and providing a rewarding occupation with great benefits.

References

- Abdul-Rahman, L., Espín Grau, H., Klaus, L. & Singelstein, T. (2020) Rassismus und Diskriminierungserfahrungen im Kontext polizeilicher Gewaltausübung. Zweiter Zwischenbericht zum Forschungsprojekt „Körperverletzung im Amt durch Polizeibeamt*innen“. Ruhr-Universität Bochum. <https://doi.org/10.13154/294-7738>.
- Alpert, G. P., Dunham, R. G. & Stroschine, M. S. (2015) Policing: Continuity and Change. Second Edition. Long Grove, IL: Waveland Press, Inc.
- Amez, S. & Baert, S. (2020) Smartphone use and academic performance: A literature review. International Journal of Educational Research. 10, 1-8. <https://doi.org/10.1016/j.ijer.2020.101618>.
- Autorengruppe Bildungsberichterstattung (eds.) (2020) Bildung in Deutschland 2020. Ein indikatorengestützter Bericht mit einer Analyse zu Bildung in einer digitalisierten Welt. Bielefeld: wbv Media.
Available from: <https://www.bildungsbericht.de/de/bildungsberichte-seit-2006/bildungsbericht-2020/pdf-dateien-2020/bildungsbericht-2020-barrierefrei.pdf> [Accessed 3rd May 2021].
- Bartkowiak-Théron, I. (2019) Research in police education: current trends, Police Practice and Research. 20(3), 220-224. <https://doi.org/10.1080/15614263.2019.1598064>.
- Bayerische Polizei (2020) Bayerische Polizei erneut als TOP-Arbeitgeber mit Platz 1 ausgezeichnet.
Available from: <https://polizei.bayern.de/muenchen/news/presse/aktuell/index.html/322289> [Accessed 30th April 2021].
- Baylis, M. & Matczak, A. (2019) Tracking the evolution of police training and education in Poland: Linear developments and exciting prospects. Police Practice and Research. 20(3), 273-287. <https://doi.org/10.1080/15614263.2019.1598072>.
- BBC (eds.) (2020) Cédric Chouviat: French police charged over death of delivery driver. British Broadcasting Company, United Kingdom.
Available from: <https://www.bbc.com/news/world-europe-53439655> [Accessed 21st May 2021].
- Beavis, C. (2017) Serious play: Literacy, learning and digital games. In C. Beavis, M. Dezuanni, & J. O'Mara (eds.) Serious Play. New York, NY, Routledge, pp. 17-34.
- Beechler, S. & Woodward, I. C. (2009) The global "war for talent". Journal of International Management. 15(3), 273-285. <https://doi.org/10.1016/j.jintman.2009.01.002>.
- Belur, J. & Bentall, C. (2021) Blended learning: The future of police education. CEPOL Online Research & Science Conference - Pandemic Effects on Law Enforcement Training and Practice, 5-7th May 2021.
Available from: https://conference.cepola.europa.eu/media/cepola-online-conference-2021/submissions/PAE7ZL/resources/J_Belur_CEPOL_conference_presentationPuA6.pdf [Accessed 25th May 2021].
- Benolli, F., Guidotti, M. & Bisogni, F. (2021) The CBRN threat. Perspective of an interagency response. In: Jacobs G., Suojanen I., Horton K., Bayerl P. (eds.) International Security Management. Advanced Sciences and Technologies for Security Applications. Springer, Cham, 429-448. https://doi.org/10.1007/978-3-030-42523-4_29.
- Bongaarts J. (2016) Development: Slow down population growth. Nature. 530(7591), 409-412. <https://doi.org/10.1038/530409a>.
- Bråten, I., Braasch, J. L. G. & Salmerón, L. (2020) Reading multiple and non-traditional texts: New opportunities and new challenges. In Moje, E. B., Afflerbach, P. Enciso, P. & Lesaux, N. K. (eds.) Handbook of reading research. Volume V. New York, Routledge, pp. 79-98.
- Camilleri, M.A. & Camilleri, A.C. (2017) Digital learning resources and ubiquitous technologies in education. Technology, Knowledge and Learning, 22(1), 65-82. <https://doi.org/10.1007/s10758-016-9287-7>.
- Campbell, W. K., Campbell, S. M., Siedor, L. E. & Twenge, J. M. (2015) Generational Differences Are Real and Useful. Industrial and Organizational Psychology. 8(03), 324-331.
- Chambers, E., Foulon, M., Handfield-Jones, H., Hankin, S. & Michaels, E. (1998). The war for talent. The McKinsey Quarterly. 3, 44-57.
Available from: https://www.researchgate.net/profile/Mark-Foulon-2/publication/284689712_The_War_for_Talent/links/58d103b94585158476f366f6/The-War-for-Talent.pdf [Accessed 3rd May 2021].
- Coates, H., James, R. & Baldwin, G. (2005) A critical examination of the effects of learning management systems on university teaching and learning. Tertiary Education and Management, 11(1), 19-36. <https://doi.org/10.1080/13583883.2005.9967137>.
- Comas, R., Sureda, J. & Urbina, S. (2006) The "copy and paste generation": Plagiarism amongst students, a review of existing literature. International Journal of Learning. 12(2), 161-168. <https://doi.org/10.18848/1447-9494/CGP/v12i02/47005>.

- Dede, C. (2005) Planning for neomillennial learning styles. *Educause Quarterly*. 28(1), 7–12. Available from: https://people.wou.edu/~girodm/middle/Dede_on_neo-millennials.pdf [Accessed 10th May 2021].
- England, K. & Azzopardi-Muscat, N. (2017) Demographic trends and public health in Europe. *European Journal of Public Health*. 27(4), 9–13. <https://doi.org/10.1093/eurpub/ckx159>.
- European Commission (2021a) Wie sehr vertrauen Sie der Polizei?
Available from: <https://de.statista.com/statistik/daten/studie/377233/umfrage/umfrage-in-deutschland-zum-vertrauen-in-die-polizei/#professional> [Accessed 21st May 2021].
- European Commission (2021b) Public opinion in the European Union. Fieldwork February–March 2021. Survey requested and co-ordinated by the European Commission, Directorate-General for Communication. Standard Eurobarometer 94 – Wave EB94.3 – Kantar.
Available from: file:///tmp/mozilla_vm0/eb_94_data_annexe_en.pdf [Accessed 21st May 2021].
- European Commission (2020) Report on the impact of demographic change.
Available from: https://ec.europa.eu/info/sites/default/files/demography_report_2020_n.pdf [Accessed 3rd May 2021].
- European Commission (2016) Building resilience: The EU's approach–factsheet.
Available from: https://ec.europa.eu/echo/files/aid/countries/factsheets/thematic/EU_building_resilience_en.pdf [Accessed 24th May 2021].
- Federal Criminal Police Office (FCPO) (eds.) (2015) Polizeiliche Kriminalstatistik 2014. Available from: https://www.bka.de/SharedDocs/Downloads/DE/Publikationen/PolizeilicheKriminalstatistik/2014/pks2014ImkBericht.pdf?sessionid=3823F8EC0C8DBC29E5712E9B2A59B5B2.live0601?__blob=publicationFile&v=1 [Accessed 18th May 2021].
- FCPO (eds.) (2016) Polizeiliche Kriminalstatistik 2015.
Available from: https://www.bka.de/SharedDocs/Downloads/DE/Publikationen/PolizeilicheKriminalstatistik/2015/pks2015ImkBericht.pdf?sessionid=A99040B04F353D2A103BFC19879F68DA.live0601?__blob=publicationFile&v=7 [Accessed 18th May 2021].
- FCPO (eds.) (2017) Polizeiliche Kriminalstatistik 2016.
Available from: https://www.bka.de/SharedDocs/Downloads/DE/Publikationen/PolizeilicheKriminalstatistik/2016/pks2016ImkBericht.pdf?sessionid=1B9D19CA8F3C8C701B6F4A7DBA8E2262.live0601?__blob=publicationFile&v=8 [Accessed 18th May 2021].
- FCPO (eds.) (2018) Polizeiliche Kriminalstatistik 2017.
Available from: https://www.bka.de/SharedDocs/Downloads/DE/Publikationen/PolizeilicheKriminalstatistik/2017/pks2017ImkBericht.pdf?sessionid=274EE0B0B1FB5DD035585C0E5A76F4D9.live0602?__blob=publicationFile&v=6 [Accessed 18th May 2021].
- FCPO (eds.) (2019) Polizeiliche Kriminalstatistik 2018.
Available from: https://www.bka.de/SharedDocs/Downloads/DE/Publikationen/PolizeilicheKriminalstatistik/2018/pks2018ImkBericht.pdf?sessionid=2685A70063E604986DD90335021FDAEB.live0601?__blob=publicationFile&v=7 [Accessed 18th May 2021].
- FCPO (eds.) (2020) Polizeiliche Kriminalstatistik 2019.
Available from: https://www.bka.de/SharedDocs/Downloads/DE/Publikationen/PolizeilicheKriminalstatistik/2019/FachlicheBroschueren/IMK-Bericht.pdf?__blob=publicationFile&v=2 [Accessed 18th May 2021].
- FCPO (eds.) (2021) Polizeiliche Kriminalstatistik 2020.
Available from: https://www.bka.de/SharedDocs/Downloads/DE/Publikationen/PolizeilicheKriminalstatistik/2020/FachlicheBroschueren/IMK-Bericht.pdf?__blob=publicationFile&v=6 [Accessed 18th May 2021].
- Frenkel, M. O., Giessing, L., Egger-Lampl, S., Hutter, V., Oudejans, R. R. D., Kleygrewe, L., Jaspaert, E. & Plessner, H. (2021) The impact of the COVID-19 pandemic on European police officers: Stress, demands, and coping resources. *Journal of Criminal Justice*. 72(101756). <https://doi.org/10.1016/j.jcrimjus.2020.101756>.
- Fuchs, M. (2020) Erste Auswertung - Digitales Ausbildungsseminar. Befragung der Beamten und Beamtinnen in Ausbildung des 25. AS, II. BPA Eichstätt. Internal presentation on 10.12.2020, Headquarters of the Bavarian Police, Bamberg.
- Fuchs, M. & Muff, A. (2021) Wie effektiv ist die Sportausbildung der Bayerischen Polizei? Eine Evaluation der Sportausbildung des mittleren Polizeivollzugsdienstes (2. QE) in Bayern. *Polizei & Wissenschaft*. 2/2021, 18–43.
- Grabosky, P. (2007) The internet, technology, and organized crime. *Asian Criminology* 2, 145–161. <https://doi.org/10.1007/s11417-007-9034-z>.
- Guterres, A. (2020) Transcript of UN Secretary-General's virtual press encounter to launch the Report on the Socio-Economic Impacts of COVID-19.
Available from: <https://www.un.org/sg/en/content/sg/press-encounter/2020-03-31/transcript-of-un-secretary-general%E2%80%99s-virtual-press-encounter-launch-the-report-the-socio-economic-impacts-of-covid-19> [Accessed 28th April 2021].
- Hargittai, E. (2010) Digital natives? Variation in internet skills and uses among members of the net generation". *Sociological Inquiry*. 80(1), 92–113.
Available from: <https://onlinelibrary.wiley.com/doi/pdf/10.1111/j.1475-682X.2009.00317.x> [Accessed 10th May 2021].
- Hasebrink, U., Hölig, S. & Wunderlich, L. (2021) #UseTheNews. Studie zur Nachrichtenkompetenz Jugendlicher und junger Erwachsener in der digitalen Medienwelt. Hamburg: Verlag Hans-Bredow-Institut. <https://doi.org/10.21241/ssaoar.72822>.

- Hiller, J. (2020) Guter Cop, böser Cop? Das Ansehen der Polizei ist hoch in Deutschland, doch die Berichte über Gewalt und Rassismus häufen sich. Was jetzt getan werden sollte. IPG-Journal. Zukunft der Sozialdemokratie.
Available from: <https://www.ipg-journal.de/rubriken/zukunft-der-sozialdemokratie/artikel/guter-cop-boeser-cop-4690/> [Accessed 21st May 2021].
- Himberg, K. (2021) COVID-19: The legacy of the pandemic in police education. CEPOL Online Research & Science Conference - Pandemic Effects on Law Enforcement Training and Practice, 5-7th May 2021.
Available from: https://conference.cepol.europa.eu/media/cepol-online-conference-2021/submissions/Z9ADBX/resources/CEPOL_Research_and_Science_Co_L8U6q04.pptx [Accessed 25th May 2021].
- Jones, D. J. (2020) The potential impacts of pandemic policing on police legitimacy: Planning past the COVID-19 crisis. Policing: A Journal of Policy and Practice. 14(3), 579–586. <https://doi.org/10.1093/police/paaa026> [Accessed 28th April 2021].
- Jones, C. & Cross, S. (2009) Is there a net generation coming to university? In: ALT-C 2009 "In Dreams Begins Responsibility": Choice, Evidence and Change, 8-10th Sep 2009, Manchester, UK.
Available from: https://oro.open.ac.uk/18468/1/ALT-C_09_proceedings_090806_web_0299.pdf [Accessed 10th May 2021].
- Kennedy, D. & Fox, R. (2013) 'Digital natives': An Asian perspective for using learning technologies. International Journal of Education and Development Using Information and Communication Technology. 9(1), 64-79.
Available from: <https://www.learnlib.org/d/111901> [Accessed 10th May 2021].
- Kendal, M. & Stacey, K. (2002) Teachers in transition: Moving towards CAS-supported classrooms. Zentralblatt für Didaktik der Mathematik 34, 196–203. <https://doi.org/10.1007/BF02655822>.
- Kirschner P. A. & De Bruyckere, P. (2017) The myths of the digital native and the multitasker. Teaching and Teacher Education. 67, 135-142. <https://doi.org/10.1016/j.tate.2017.06.001>.
- Koerner, S. & Staller, M. S. (2020) Coaching self-defense under COVID-19: Challenges and solutions in the police and civilian domain. Security Journal. <https://doi.org/10.1057/s41284-020-00269-9>.
- Krott, N. R., Krott, E. & Zeitner, I. (2018) Xenophobic attitudes in German police officers: A longitudinal investigation from professional education to practice. International Journal of Police Science & Management, 20(3), 174-184. <https://doi.org/10.1177/1461355718788373>.
- Landry, A. T., Schweyer, A. & Whillans, A. (2018) Winning the war for talent: Modern motivational methods for attracting and retaining employees. Compensation & Benefits Review, 49(4), 230-246. <https://doi.org/10.1177/0886368718808152>.
- Margaryan, A. & Littlejohn, A. (2008) Are digital natives a myth or reality? Students' use of technologies for learning. Glasgow Caledonian University Insight Paper.
Available from: <https://oro.open.ac.uk/53083/1/Digital%20Natives%202008.pdf>.
- Margaryan, A., Littlejohn, A. & Vojt, G. (2011) Are digital natives a myth or reality? University students' use of digital technologies. Computers and Education, 56, 429-440. <http://dx.doi.org/10.1016/j.compedu.2010.09.004>.
- Matthews, R. (2020) New times, new crimes: Notes on the depillarization of the criminal justice system. Critical Criminology: An International Journal. 28, 309-326. <https://doi.org/10.1007/s10612-020-09489-2>.
- McCrindle, M. (2014) The ABC of XYZ: Understanding the global generations. Bella Vista, McCrindle Research Pty Ltd.
- Moore, K., Jones, C. & Frazier, R. S. (2017) Engineering education for Generation Z. American Journal of Engineering Education. 8(2), 111-126. <https://doi.org/10.19030/ajee.v8i2.10067>.
- Muff, A. & Fuchs, M. (2020) Förderung von Resilienz gegen Radikalisierung. Befragung von Beamten und Beamtinnen in Ausbildung. Internal presentation on 14.07.2020, Headquarters of the Bavarian Police, Bamberg.
- Norddeutscher Rundfunk (eds.) (2020) Rechtsextremismus bei Polizei in NRW. BKA-Chef fürchtet Vertrauensverlust. Norddeutscher Rundfunk. Anstalt des öffentlichen Rechts.
Available from: <https://www.tagesschau.de/inland/nrw-polizei-rechtsextremismus-103.html> [Accessed 21st May 2021].
- OECD (2021) 21st-Century Readers: Developing Literacy Skills in a Digital World. Paris: PISA, OECD Publishing. <https://doi.org/10.1787/a83d84cb-en>.
- Oigara, J. N. & Ferguson, J. M. (2020) iPads in the classroom: Benefits and challenges. In: L. A. Tomei & D. D. Carbonara (eds.), Handbook of Research on Diverse Teaching Strategies for the Technology-Rich Classroom (319-340). Hershey, PA: IGI Global. <https://doi.org/10.4018/978-1-7998-0238-9.ch020>.
- Onishi, N. (2020) Black man is beaten on camera, thrusting French police into spotlight. New York Times.
Available from <https://www.nytimes.com/2020/12/04/world/europe/Michel-Zecler-france-police-video-beating.html> [Accessed 21st May 2021].
- Polizei Bayern (2020) Leitbild der Bayer. Polizei - Handlungs- und Orientierungsrahmen für die Zukunft.
Available from: <https://www.polizei.bayern.de/wir/leitbild/index.html/3249> [Accessed 31st May 2021].

- Prensky, M. (2001) Digital natives, digital immigrants. On the Horizon. 9(5), 1–6.
Available from: http://educ116eff11.pbworks.com/f/prensky_digital%20natives.pdf [Accessed 10th May 2021].
- Ransley, J. & Mazerolle, L. (2009) Policing in an era of uncertainty. Police Practice and Research. 10(4), 365–381. <https://doi.org/10.1080/15614260802586335>.
- Schienkiewitz, A., Brettschneider, A.-H., Damerow, S. & Schaffrath Rosario, A. (2018) Übergewicht und Adipositas im Kindes- und Jugendalter in Deutschland – Querschnittergebnisse aus KiGGS Welle 2 und Trends. Journal of Health Monitoring, 3(1), 16–23. <http://dx.doi.org/10.17886/RKI-GBE-2018-005.2>.
- Seemiller, C. & Grace, M. (2017) Generation Z: Educating and engaging the next generation of students. About Campus: Enriching the Student Learning Experience. 22(3), 21–26. <https://doi.org/10.1002/abc.21293>.
- Seemiller, C. & Grace, M. (2016) Generation Z goes to college. San Francisco, CA: Jossey-Bass.
- Sehl, M. (2021) Rechte Polizei-Chatgruppen. Was wurde aus „null Toleranz“? Norddeutscher Rundfunk. Anstalt des öffentlichen Rechts.
Available from: <https://www.tagesschau.de/inland/gesellschaft/rechtechatgruppenpolizei-101.html> [Accessed 21st May 2021].
- Shatto, B. & Erwin, K. (2016) Moving on from millennials: Preparing for generation Z. The Journal of Continuing Education in Nursing. 47(6), 253–254. <https://doi.org/10.3928/00220124-20160518-05>.
- Statist. (eds.) (2019) Zahl der Woche. 53 % der Erwachsenen waren 2017 übergewichtig.
Available from: https://www.destatis.de/DE/Presse/Pressemitteilungen/Zahl-der-Woche/2019/PD19_14_p002.html [Accessed 3rd May 2021].
- Stephanidis, C., Salvendy, G., Antona, M., Chen, J. Y., Dong, J., Duffy, V. G., ... Guo, Y. (2019) Seven HCI grand challenges. International Journal of Human–Computer Interaction. 35(14), 1229–1269. <https://doi.org/10.1080/10447318.2019.1619259>.
- Stogner, J., Miller, B. L. & McLean, K. (2020) Police stress, mental health, and resiliency during the COVID-19 pandemic. American Journal of Criminal Justice. 45, 718–730. <https://doi.org/10.1007/s12103-020-09548-y>.
- Ten Velde, G., Lubrecht, J., Arayess, L., van Loo, C., Hesselink, M., Reijnders, D. & Vreugdenhil (2021) Physical activity behaviour and screen time in Dutch children during the COVID-19 Pandemic: Pre-, during- and post-school closures. Pediatric Obesity, e12779. <https://doi.org/10.1111/ijpo.12779>.
- Trendence (2019) Trend analysis of the pupil barometer. Evaluation for the Bavarian police. Internal presentation by the Trendence institute on 12.11.2019, Headquarters of the Bavarian Police, Bamberg.
- United Nations (2019) World population prospects 2019. Population growth rate.
Available from: <https://population.un.org/wpp/Download/Standard/Population/> [Accessed 3rd May 2021].
- Vuorikari R, Punie Y, Carretero Gomez S. & Van Den Brande G. (2016) DigComp 2.0: The Digital Competence Framework for Citizens. Update Phase 1: the Conceptual Reference Model. Luxembourg: Publications Office of the European Union. <https://doi.org/10.2791/11517>.
- Watson, W. R. & Watson, S. L. (2007) An argument for clarity: What are learning management systems, what are they not, and what should they become? TechTrends, 51(2), 28–34.
Available from: https://cardinalsolar.bsu.edu/bitstream/handle/123456789/194513/Watson_Argume?sequence=1 [Accessed 14th May 2021].
- Williams, K. & Toldson, I. (2020) Reimagining education as a point of resistance (Guest Editorial). The Journal of Negro Education. 89(3), 193–202.
Available from: <https://www.jstor.org/stable/10.7709/jnegroeducation.89.3.0193> [Accessed 21st May 2021].
- Wilson, J. M., Dalton, E., Scheer, C. & Grammich, C. (2010) Police recruitment and retention for the new millennium: The state of knowledge. Santa Monica, CA: RAND Corporation. Available from: [https://nccpsafety.org/assets/files/library/Police Recruitment and Retention for the New Millennium.pdf](https://nccpsafety.org/assets/files/library/Police%20Recruitment%20and%20Retention%20for%20the%20New%20Millennium.pdf) [Accessed 21st May 2021].
- Wilson, K. A., Bedwell, W. L., Lazzara, E. H., Salas, E., Burke, C. S., Estock, J., Orvis, K. L. & Conkey, C. (2009) Relationships between game attributes and learning outcomes: Review and research proposals. Simulation & Gaming. 40(2), 217–266. <https://doi.org/10.1177/1046878108321866>.