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Ageing from a pluralistic perspective

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Abstract:
The issue of old age and ageing covers only the periphery in philosophy. This may be illustrated by taking a look at the history of philosophy within which only a few texts and authors could be found taking pains to shape our understanding of old age. Among them there have been Cicero (Cato the Elder on Old Age), Plutarch (An seni respublica gerenda; Moralia 783B-797F) and, closer to us in time, Schopenhauer (Pererga and Paralipomena, Short Philosophical Essays) and S. de Beauvoir (La Vieillesse). Despite this, there has been more recent attempts at a more complex assessment of the issue of old age in philosophy.
There are two essential reasons for the historical marginal positioning of old age in philosophy:
Firstly, the topic of old age and elderly people is less attractive; it struggles to make its way against the great issues of philosophy and is more found in its shade when regarding the issue of death. This statement proves valid both in considering the history of philosophy and modern philosophy within which not many authors pay attention to questions of old age and ageing. From among the few, M. C. Nussbaum, J. Baars, T. Rentsch, H. Kunneman, D. Carr, M. Schwed, can be mentioned at this point. It is more often the case that important contributions that address the essence of old age and overlap into philosophy are to be found on miscellaneous research grounds; such as in psychology, literature, gerontology, or ethics of the helping professions.
Secondly, it was only the qualitative development of environmental conditions, the possibilities of medical science and nursing care in the modern era, and also the low demographic increase in population, that have made the elderly an important part of the population, which, in turn, had them facing a number of challenges: self-realisation, the ideal of youth and, hopefully, the ideal of a successful old age. In other words, elderly people stopped being a minor exception or a deviation from nature, but also an important socio-political issue requiring both an inter-disciplinary and a philosophical approach.
On a broad level the goal of this article is to draw attention to the connections among philosophy, the elderly, and ageing, which has been historically marginalized. Philosophy, at least since the times of Socrates, has focused, though not exclusively, on the individual, who is indeed capable of many things. This was made concrete in modern philosophy in the ideal of autonomy as the ability to be one's own ruler. It is no wonder that marginalized groups, and we are especially interested in the elderly, have also remained on the fringe of interest for philosophers.
The article approaches the topic of the elderly, old age, and ageing from what is called a pluralistic position because this can allow for the avoidance of oversimplification which is often connected with the concept of loss. It is important to mention in this connection that the possibility of loss is a structural feature, not only of the pluralistic perspective, but also from the perspective of the narrativistic conception of identity, so often used in psychology and sociology especially in the context of the broader thema of the meaning of life. The natural need for the recognition of loss in the narrativistic approach to human identity leads also naturally to the context where loss is profoundly discussed. If we look at the genealogy of this problem, the confrontation between Plato and the sophists emerges as important and the position of Aristotle as pivotal. For this purpose, to show how a pluralistic perspective uses loss as a key feature of human life, attention is paid to the difference between pluralism and monism in order to be able to capture the most significant elements by means of their confrontation, and from the point of view of our topic. A possible contribution of the pluralistic approach to the topic of the elderly and old age is also reflected. This could, in my opinion, be beneficial for the caring professions.

More specifically the goals of the following text are: a) to proceed from the possibility of loss in connection with virtuous choice and indicate the way in which it has been traditionally understood; preferably in confrontation with the monistic perspective. Because of the central role of the discussion amongst Plato or sophists, attention is paid to Plato´s dialogue Protagoras; where the basic distinctions of pluralistic and monistic approach to ethical matter are presented and where we can find the crossroad of western ethical thinking; b) to relate the acquired knowledge to a chosen specific group threatened by marginalization; the elderly; c) to suggest a possible contribution of the pluralistic perspective for working with the elderly.

Keywords:
Pluralism. Monism. Marginalized groups. Stigmatization. Elderly people. Philosophy.

Introduction

The so-called marginalised groups occupy a very important position in the area of social sciences. These are groups which, for many reasons, are on the periphery of society, or are at risk of becoming so. The goal of many social sciences is also to work with the phenomenon of marginalisation and to try to mitigate it or its consequences. Social interest is mirrored in these pursuits because marginalisation is a sign of problems or dysfunctions that cannot be ignored in the network of complicated social relationships without considerable negative consequences. It would be difficult to deny that these endeavours are also a sign of natural human efforts to help or to provide help to others. Nevertheless, we would not be talking about marginalised groups, if the reality or the possibility of marginalisation did not play an important role. People who are threatened by this phenomenon receive attention from the social sciences, helping professions, or random individual circumstances only to a limited degree and often in a very distorted (stereotypical, stigmatizing) way (Nussbaum, Levmore 2017, 22). The popular media can, first of all, be a good example, or maybe a deterrent example in this respect. They are preoccupied with stereotypes of the modern ideals of youth, beauty, success, independence, wealth or enjoyment.[1]

Should we ask how philosophy is doing, we can definitely be surprised that western philosophy, at least since the times of Socrates, has focused, though not exclusively, on the individual, who is indeed capable of many things. This was made concrete in modern philosophy in the ideal of autonomy as the ability to be one's own ruler.[2] It is no wonder that marginalized groups, and we are especially interested in the elderly, have also remained on the fringes of interest to philosophers. The moderate increase in the interest of modern philosophy in the phenomenon of ageing has been mostly overshadowed by the finality (mortality) of man. However, this can now be seen as potentially unsustainable if we consider the socio-demographic changes in modern societies.[3]

With these comments we are approaching an important intersection of social sciences and philosophy. People who lack one or more competences, knowledge-based, physical, cognitive or social, very often end up in marginalized positions. Therefore, *loss* or *lack* (Nussbaum, Levmore 2017, 19) are what they have in common. Philosophy and social sciences, together with the helping professions, will intersect at those places where *loss* is more apparent and becomes an acceptable, although in a way problematic, side-effect of human life. From the point of view of an autonomous subject (an ideal), as described with Kant's or Rawls's philosophy, if we help ourselves with the most used examples in practical philosophy of the

[1] There are several pieces research; Clarke, Bennett, Liu 2014, 26-33 for example.
[2] More in detail on the relation of philosophy and humanities in Cole 1992, i-xv; De Luce 1992, 3-39; Troyansky 1992, 40-61.
[3] To compare the topic for philosophy cf. (Baars 1997, 259; Baars 2010, 105-120; Overall 2016, 13-30; Rentsch 1997, 263-271).

last years, it could happen that the dignity of the other person will be based more on our obligation (if something like that is even possible) and not on the demand for a *good life* of another person. But this is not the only legacy of the long tradition of European philosophy. Next to these demanding concepts of man there is a tradition that directly lies in the possibility of *loss* and is referred to as *pluralism* in the current theoretical discourse (Apfel 2011, 1 – 42). The goals of the following text are: a) to proceed from the possibility of *loss* and indicate the way in which it has been traditionally understood, preferably in confrontation with the monistic perspective (Rentsch 1997, 264); b) to relate the acquired knowledge to a chosen specific group threatened by marginalization to the elderly; c) to imply a possible contribution of the pluralistic perspective for working with the elderly.

1. Pluralism and its content

As mentioned earlier, we can get closer to the delimitation of pluralism with the help of the notion of *loss*. This is certainly a broad approach that can encompass many things. Nevertheless, if we take into consideration the original context of its development, especially the discussion of Socrates and Protagoras, as well as its re-actualization in quite a recent chapter in the history of philosophy, we will find out that *loss* has been understood as an always imminent discord or always threatening disharmony in our life projects, plans, images, a discord that can, moreover, result from a good (virtuous) choice.

I. Berlin, a prominent 20th century exponent and historian of pluralistic thinking (Apfel 2011, 1-3), deals with the issue of pluralism in the history of ethical thinking. In his famous text *Two Concepts of Liberty* he asks the following question: *'Is it possible that Socrates and the creators of the crucial western tradition of ethics and politics who followed him, have been wrong for more than two thousand years in that virtue is knowledge and that liberty is identical to both?'* (Berlin 1999, 258). The American philosopher Martha Nussbaum answers Berlin's question positively. Yes, Socrates and Plato were wrong. They bequeathed European thinking an ethical paradigm that is not completely in accordance with the way an adult and rational human being understands a meaningful life. According to her, even Aristotle was aware of that (Nussbaum 1990a, 60; 2003, 77). To be able to understand this statement completely, we have to go back to the 5th century BC approximately, to describe this decisive moment of European intellectual history while concentrating primarily on the content of pluralistic ethics and the proposal of its opponent – the *monistic* thinking represented mainly by Socrates and Plato.

1.1. The issue of commensurability

The relatively unusual dialogue *Protagoras* (Nussbaum 1990, 108) is a fundamental text which will make the core of Socrates's and Plato's position accessible to us. From the point of view of our issue, we can say that Plato's choice of the title of the dialogue and also the prominent and exclusive partner of Socrates's conversation, Protagoras, is a programme declaration. Its content is the delineation, recognition, and elimination of a very persistent way of perceiving human life, the values connected to it and their reception in everyday life, philosophy, and art – there are many values and virtues. And it is not always possible to make a rational choice among these. This is, as shown by the playwrights of the 5th century BC, necessarily connected to *loss* as a part of human life (Nussbaum 1990b, 106–107; 2003, 76–77; Jenik 2017a, 2017b).[4] Protagoras can be considered one of the most significant theorists of pluralistic ethics, a sophist appreciated perhaps by Plato himself (Apfel 2011, 45 – 78; Gagarin 1969; Wolfsdorf 1989). At the same time, it is right to say that the picture, and let us say that it has been at least an

[4] For central aspects of Plato's ethics see (Shorey 1972, 7).

ambivalent picture which traditional history of philosophy has created of the sophists, has been influenced precisely by Plato (Apfel 2011, 38-41). To be able to appreciate the significance of the Protagoras dialogue, we must remember Socrates's words that characterize his intellectual work in the area of ethics with relation to ethical pluralistic thinking. His goal is nothing else than to give to the human life the all-changing gift of *life rescue and salvation of man* (*Prot*., 365d-357b; Nussbaumová 2003, 241). Socrates demands, or proposes, a revolution in practical thinking that lies in his transformation of *techne* or *measuring art.* The warnings of Berlin might indicate that the revolution of Socrates has been successful in many ways.

The dialogue *Protagoras* represents, therefore, is mainly a conflict of two generations of philosophers, old Protagoras and Socrates, and two philosophical strategies (Fossheim 2017, 9-21). Nevertheless, the greater contrast, we are mostly concerned with (pluralism versus monism), is not apparent at first sight and does not appear. On the contrary, it seems that Plato is concerned either with keeping continuity between Protagoras and Socrates (*Prót.*, 361e), or, on the other hand, with discrediting him as a virtuous teacher and philosopher. Nevertheless, if we accept the former alternative and depart from the basic problem of what is *virtue,* Protagoras agrees with Socrates on one basic moment or conviction: *virtue can be taught.* Both participants of the dialogue thus demand the certainty and form of art (*techne).* Protagoras confesses this conviction in several ways. Firstly, it is in his 'great speech' (314c3-328d2) in which he talks about his famous myth (*mythos*) of the origin and conditions of political society but also the emphasis (*logos)* that could rather be understood sociologically. An important fact in this context is the following: a) Socrates seems to be captivated by Protagoras's 'great speech'. There is no reason to believe that his appraisal is solely ironic; b) Protagoras expresses in this speech an identical conviction to that of Socrates at the end of the whole dialogue. It is the conviction that virtue can be learned, by the means used by Socrates himself at the beginning of the dialogue in his conversation with Hippocrates. Protagoras comes closer to Socrates's position with his statement that knowledge is the most significant virtue. This can be understood as an expression of professional loyalty.

What is, therefore, the main difference which we proposed earlier? It lies in the delineation of virtue or virtues and in the form of the offered practical art. In other words, it lies in the answer to the question of mutual relationship of various virtues and the way of their transmission (*Prot.*, 349b-d). While for Socrates virtues are commensurable, for Protagoras they are not.

1.2. Pluralistic tradition

We have chosen Protagoras as a representative of the pluralistic tradition. We could say, bering in mind the ethical standpoint declared in the dialogue *Protagoras,* addressing the standpoint of un-commensurability of virtues (the relation of virtues is the same in relation to the different parts of a face), that this presupposition is not problematic. Nevertheless, the history of philosophy often does not share this approach towards Protagoras. And more than about his pluralism they talk about his ethical relativism or even subjectivism. They depart mainly from the famous *homo mensural* statement*: 'man as the measure of all things, beings that they are, non-beings that they are not'* (DK80b1). An ethical position stated like that then certainly stops being interesting. In our text, we will not try to judge between these two approaches as concerns Protagoras. Instead, we will try to demonstrate facts in favour of the pluralistic interpretation. And that mainly with the goal of casting some light on the pluralistic ethical approach.

As M. Nussbaum and L. Apfel show, it is necessary to fit Protagoras's activities into a proper cultural context and mental context. This is eventually what Plato challenges us to do, primarily in the dialogue *Protagoras*, where he characterizes the ability to teach virtue in Protagoras's interpretation as upbringing. He also indirectly chooses sophists as his opponents alongside Greek dramatists of the 5th century BC. M. Nussbaum, in this context, claims that sophists,

especially Protagoras, and dramatists such as Aeschylus, Sophocles, and Euripides, had many things in common. They shared the belief in the imperfection or possible *tragedy* of human life. In other words, *saving of life* and *salvation of life*, as Plato sees it, was not achievable for them. That was apparent from the fact that determines the basis of tragedy – even the choice among virtues (*goods*) can be associated with loss, loss threatening the welfare of life. Without taking into consideration the efforts and qualities of particular subjects, we can mention the fates of Electra and Antigone as classic examples. Not to be the master of your own destiny (salvation of man, saving of life) was unacceptable to both Socrates and Plato. That is why they offer this measuring art, to take the tragedy away from human life. That is also why Socrates offers a gift to change human life that lies in the elimination of its *fragility* or possible *tragedy*. As M. Nussbaum points out to us, Aristotle already came up with the fact that we would have to pay a very high price for this gift and that no rationally thinking adult man would accept it if they were aware of the complexity and richness of human life (Nussbaum 1990a, 60; Rentsch 1997, 263).

What could, therefore, be understood as the content of the pluralistic ethical position? The most important features could be understood as follows: a) There are many values (virtues) and these virtues cannot be reduced to one being more important than the others. There is no measure to help you decide among those (measuring art); b) Conflict is inseparable from our lives; c) Human life cannot be ideal, because even in the area of ethics, it is always in danger – it could be deprived of good, independent of our actions; d) The question of a good life remains the most important issue of practical philosophy. We can add the following notes to these points:

Ad a) We already dealt with this momentum of the pluralistic position. This is why it suffices to imply the links to the famous statement of Protagoras's *homo mensura.* Taking in mind the interpretation tradition, we can understand it in a relativistic and a subjective sense. Firstly, the content of Protagoras's subjectivism would constitute the following conviction: anything that is believed by anyone is true; but this is only true exactly for this person. On the other hand, subjectivism is based on the ontology of private objects and their statements are true *simpliciter* because they describe the state of mind of the speaker. In the case of relativism, the situation is even simpler as relativism does not deny, as subjectivism does, only the possibility of transpersonal truth but also the possibility that any statement would be true *simpliciter*. If we return to pluralism, its content is much less radical: the decision of what is true remains sometimes, in some cases, ambiguous (Apfel 2011, 47-51).

Ad b) If not only Protagoras but also the authors of tragedies belong in the camp of the enemies of Plato or the enemies of the measuring art, this has its origin in relation to conflict. Should Protagoras be viewed as a pluralist, the conflict is not only a result of our cognitive inability but more deeply a result of the necessity to choose among different goods. The conflict is not curable, it is a part of our lives, and that in a positive way. Aristotle insinuates this when he rejects Socrates's gift of life simplification (getting rid of conflict) as too expensive. On accepting it, we would give up exactly those things that are human – choice, love, friendship, emotions etc.

Ad c) It cannot be ideal. It also cannot be evaluated in a unified (stereotypical) way. In connection to our issue of old age, it means that a pluralistic perspective is not in concord with the attempts to perceive old age from the perspective of merely a few values, such as success, performance, beauty or the fulfilment of roles pertaining to other phases of life (Nussbaum 2017, 24).

Ad d) The classical ethical tradition turns toward the issue of *good life (blessedness).* The pluralistic tradition is no different in this way. On the contrary, it deals with the conditions of this *good life* of man in relation to a concrete situation of each individual. It is, therefore, no surprise that this particular situation could also be the last *phase of life.*

Let us conclude this section in the following way: ethical pluralism says yes to the complexity of human life which cannot be perfect – controlled by the art of measuring. On the contrary, loss – physical, mental, and ethical (the fragility of good), remains a part of it. The following statement is important for the purposes of our text: life cannot be evaluated using one sole measure. Its value is determined by the strength of our intellect, but also emotions, character of the social context, relationships, etc. Although these statements may seem obvious to us, studies that deal with the image of old age in the media indicate that old age, and things that could belong to it, have so far been obscured (Clarke, Bennett, Liu 2014).

2. Pluralism in relation to old age

Let us now examine the possible contribution of ethical pluralism in the context of the philosophy of old age. As we have so far been dealing with pluralism mainly from the point of view of *loss* and the absence of *regard* at decision-making, we shall take these moments as our starting point. The possibility of classification of this topic material is clearly visible because old age, as has been mentioned a few times, is connected to *loss*. What matters is how this loss is viewed by the subject themselves or by the environment. We will keep to this division.

So far we have been talking about loss in two ways; in the general meaning, and in the ethical sense which we have understood as the outcome of choice between two incommensurable goods. Now we will try to widen the term loss, taking into consideration the situation of old age. Loss can directly influence physical, mental and emotional competences or abilities, and can also influence the quality of social and family relations. In this enumeration, we should mention that loss should also be discussed as the result of choice. This type of loss will be dealt with separately. What does the pluralistic approach say in connection to these types of loss?

Firstly, it needs to be said that the particular types should be viewed in a very wide context. That means, that unlike the monistic perspective, loss is not connected in one area to the loss of identity. That could be seen as a very important contribution because the physical and mental fitness is often too connected to its understanding. The ethical importance of the issue of identity is then often pointed out by discussions that stretch from unborn babies to people with Alzheimer's disease (Jungert 2018). A very good example of this situation in literature is given by M. Nussbaum in her interpretation of Shakespeare's King Lear. Lear built up his identity on power and was unable to cope with its loss as indicated with these words:

> 'Doth any here know me? This is not Lear;
> Doth Lear walk thus? Speak thus? Where are his eyes?
> Either his notion weakens, his discernings
> are lethargied. Ha! Waking? Tis not so!
> Who is it that can tell me who I am?' (Shakespeare 2005, 37)

Except for that, this loss and other losses connected with old age could not have been compensated from emotional and relational sources (Nussbaum 2017, 20). The acceptance of the reality that we cannot do many things without the help of others was very difficult for him, and also internally, in the sense of self-perception, devastating.

Another advantage of the pluralistic approach, in which the decisive position is not occupied by only one point of view, is its ability to withstand stereotypes that are connected to old age and ageing, which is a current fact of the popular culture. If it is true that old age is often connected with stigmatization (old people are ugly, hence, not magazine-style beautiful; incompetent, therefore not efficient; not useful, therefore useless), the complexity of identity offered by the pluralistic approach is protected from its decomposition; even to the extent that

it can be preserved only from external narrative sources. This is also the reason why especially the narrative concept of identity, which departs from the work of P. Ricoeur, has established itself so well in the philosophy of old age (Baars 1997, 2012, 2014; Coors 2014; Kunneman 1997). If we do not express how important the richness of the pluralistic understanding of *good* in human life is, this could also mean that even the simplest relationships, based on emotionality or necessity, can immunize not only the environment but also the self-understanding of the elderly against stereotypes which often affect them (Nussbaum 2017, 25).

To sum up these, not fully exhaustive, notes on the possible contribution of the pluralistic perspective on the approach to old age and ageing, we could state these three points: a) Pluralism does not refer to relativism or subjectivism. It is a philosophical strategy. Within its framework it makes sense to talk about *good life*, good decision-making and good behaviour. It is surprising, in relation to this, that the good life of old people is often not talked about. This is especially true in comparison with other ideals: success, activity, creativity, self-realization or even competitiveness; b) Ethical pluralism avoids generalizing too much in relation to what this good life actually is, which can often have exclusivist (marginalizing) effects; c) Ethical pluralism is very humane because some decisions with unfortunate results are not failures but just parts of the story; d) Finally, the pluralistic rejection of a unifying regard, that could also be chronological time, makes old age accessible to loss, yet always in a concrete way, not in a stereotypical way.

Conclusion

The topic of old age, ageing, and the elderly has occupied a secondary position in philosophy despite it being a challenging topic due to the fact that average life expectancy has been on the increase in modern societies and elderly people have stopped being an exception. The purpose of the offered text was to show the intersecting points between the mentioned topic and philosophy, and to imply a possible perspective approach that would take into consideration the not so insignificant variety of manifestations of old age as well as the fact that old age is often connected with loss; one which does not often have to be of a temporal character. In accordance with that, the pluralistic approach seems to be very favourable because, from the external point of view, it eliminates phenomena such as marginalization, stigmatization, and stereotyping in which ageing is often connected. From the internal point of view, it allows a rich understanding of identity and autonomy of the subject.

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The progress that motivates - when we want to: Perceived progress as a mediator of the relationship between self-concordance and ongoing effort expenditure

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Abstract:
The present study examines the proposal that perceived progress mediates the relationship between self-concordance and continued effort expenditure. According to Sheldon and Elliot (1999), goal-striving consists of a positive relationship between motivation, effort and goal attainment. There is a positive influence of motivation on the applied effort which is reflected in the progress in goal attainment. However, when goal pursuit is prolonged, the repeated monitoring of goal progress takes place and the result of this monitoring may influence further effort expenditure (Carver & Scheier, 2016; Uy, Foo, & Ilies, 2015). Accordingly, on the one hand, the actual state is influenced by the effort that has been exerted. On the other hand, perceived progress has some implications for the ongoing (consequent) effort. In fact, it was shown that the effect of perceived progress on further goal striving can be ambiguous (Fishbach, Eyal, & Finkelstein, 2010). In some cases, partial success results in increased effort, however, in other cases, the increase in effort is more apparent when previous progress does not meet expectations. The main aim of the present study was to verify the relationship between autonomous vs. controlled motivation and exerted effort in continuing goal achievement at the stage where the monitoring of goal progress is part of further goal attainment. In particular, if perceived progress acts as a mediator in the relationship between autonomous motivation (self-concordance) and ongoing effort. This focus on motivation can shed some light on why the achievement of partial progress sometimes leads to an increase and sometimes to a decrease in the consequent effort towards a goal.
In our study, it was hypothesized that our data are in line with a simple mediation model proposing that perceived progress accounts for the variance between self-concordance and effort expenditure, both cross-sectionally and longitudinally (H1). Additionally, it was expected that self-concordance is positively related to perceived progress (H2), and perceived progress is related to the effort (H3). However, as both directions are possible regarding this relationship, a further corroboration of this issue was the additional aim of this study.
In order to corroborate this issue thoroughly, one exploratory (N=280); and two additional confirmatory studies were conducted, a cross-sectional conceptual replication with N=191 high school students and longitudinal study with first-

year undergraduate university students (analyzed both longitudinally, N=135; and cross-sectionally - measurement 1 at the beginning of the semester, N=245, vs. measurement 2 at the end of the semester, N=190).
The results of the simple mediation analysis in study 1 have indicated that progress accounts for the variance between self-concordance and effort. The more self-concordant the goal was, the more progress was made, and the more effort was put in. The direct effect of self-concordance on effort was significant (b = .071, SE = .019, 95 % CI [.034, .108]); and the indirect effect of self-concordance through goal progress on effort was significant as well (b = .026, SE = .009, 95 % CI [.011, .046]). The pattern of results from study 2 was in line with study 1. Perceived progress accounted for the variance between self-concordance and effort. The direct effect of self-concordance on effort was not significant (b = .036, SE = .056, 95 % CI [-.074, .146]); and the indirect effect of self-concordance through goal progress on effort was significant (b = .201, SE = .045, 95 % CI [.118, .296]). In study 3, measurements were carried out twice, at the beginning of the semester, and at the end of the semester. Analysis of data at the beginning of the semester showed that the direct effect of self-concordance on effort was significant (b = .173, SE = .046, 95 % CI [.083, .262]). The indirect effect of self-concordance through goal progress on the effort was significant as well (b = .103, SE = .0,23, 95 % CI [.062, .153]). Analysis of data at the end of the semester showed that the direct effect of self-concordance on effort was not significant (b = .026, SE = .051, 95 % CI [-.074, .126]). The indirect effect of self-concordance through goal progress on effort was significant (b = .132, SE = .046, 95 % CI [.041, .222]). The results of study 3 at both measurement points were, therefore, in line with previous studies. The results of the longitudinal analysis were in line with previous results although only when the separate index of autonomous motivation was used. Using self-concordance index, the direct effect of self-concordance on effort was not significant (b = -.024, SE = .054, 95 % CI [-.132, .083]). Nor was the indirect effect of self-concordance through goal progress on effort (b = .038, SE = .035, 95 % CI [-.031, -.107]). However, when analyzing the autonomous and controlled motivations separately, as suggested e.g. by Koestner et al. (2008), full mediation occurred with the index of autonomous motivation. Perceived progress fully mediated the relationship between the variables. The direct effect of autonomous motivation on effort was not significant (b = .111, SE = .101, 95 % CI [-.088, .310]) while indirect effect of autonomous motivation through goal progress on effort was significant (b = .155, SE = .062, 95 % CI [.039, .282]).
To sum up, it has been shown that perceived progress either partially (studies 1 and 3) or fully (studies 2 and 3) mediated the relationship between self-concordance and effort. Furthermore, the results of the longitudinal study corroborated this pattern of results; although only when the separate index of autonomous motivation was used. The results were in line with the prediction that perceived progress mediates the relationship between self-concordance and consequent effort. Furthermore, both self-concordance and perceived progress were positively related to effort expenditure.

Keywords:
Self-concordance. Autonomous vs. controlled motivation. Perceived progress. Effort expenditure. Simple mediation analysis.

According to Sheldon and Elliot (1999), goal striving consists of a positive relationship between motivation, effort and goal attainment; there is a positive influence of motivation on the applied effort which is reflected in the progress. However, when a goal pursuit is prolonged, repeated monitoring of goal progress takes place and the result of this monitoring may influence further effort expenditure (Carver & Scheier, 2016; Uy, Foo, & Ilies, 2015). Accordingly, on one hand, the actual state is influenced by the effort that has been exerted, while on the other hand, perceived progress has some implications for ongoing (consequent) effort. In fact, it has been shown that the effect of perceived progress on further goal striving can be ambiguous (Fishbach, Eyal, & Finkelstein, 2010). In some cases, partial success results in increased effort. However, in other cases, the increase in effort is more apparent when previous progress does not meet expectations. The main aim of the present study is to verify the relationship between autonomous versus controlled motivation and exerted effort in continuing goal achievement at the stage where the monitoring of goal progress is part of goal attainment. In particular, we would like to corroborate

if perceived progress acts as a mediator in the relationship between autonomous motivation (self-concordance) and ongoing effort. This focus on motivation can shed some light on why the achievement of partial progress sometimes leads to an increase and sometimes to a decrease in the consequent effort towards a goal.

Self-Concordant Goals and Autonomous Motivation

Based on Self-determination Theory (SDT), the model of self-concordance distinguishes between goals that stem from internal values and interests and goals that stem from other, more extrinsic sources (Deci & Ryan, 2002; Sheldon, 2014; Sheldon & Elliot, 1998). In the terminology of SDT, this is captured by the self-concordant index which is calculated as autonomous motives (intrinsic and identified motivation) subtracted from controlled motives (extrinsic and introjected motivation). However, some authors prefer a separate analysis of autonomous and controlled motivation (see e.g. Koestner, Otis, Powers, Pelletier, & Gagnon, 2008).

Autonomous motivation is related to the goals that are inherently important for an individual and autonomously stem from the will of the individual (called "want-to" motivation). In contrast, *extrinsic* motivation is related to more extrinsic factors that determine goal pursuits such as the expectation of external rewards or avoidance of negative consequences (called "have-to" motivation) (Deci & Ryan, 2002; Milyavskaya, Inzlicht, Hope, & Koestner, 2015; Sheldon, 2014; Sheldon & Elliot, 1998). As indicated by the ample body of evidence, such a distinction seems to be an important factor with regard to goal attainment.

Effort expenditure and perceived progress in relation to self-concordant motivation

The relationship between self-concordance and various self-regulation processes such as effort and perceived progress can be found across the literature (e.g. Koestner, Lekes, Powers, & Chicoine, 2002; Koestner et al., 2008; Milyavskaya et al., 2015; Sheldon & Elliot, 1999; Sheldon & Houser-Marko, 2001). According to Sheldon and Elliot (1998, 1999), autonomous motivation positively influences the amount of effort exertion, adds to its quality and increases the likelihood of goal progress and goal attainment. In a similar vein, a meta-analysis conducted by Koestner et al. (2002) found that self-concordance is positively related to goal progress. In their meta-analytical study, Gaudreau, Carraro and Miranda (2012) examined the relationship between autonomous motivation and progress. They found that the relationship between these two variables was mediated by self-regulatory factors such as action planning and effort. However, the relationship between goal progress and effort seems to be more complex; especially when considering the longitudinal nature of goal pursuit. Invested effort influences progress, nevertheless, as goal striving continues, the monitoring of goal progress can influence the following effort expenditure in the later phases of goal striving. According to prominent self-regulatory theories such as the Cybernetic model (Carver & Scheier, 2016), monitoring of goal progress is crucial for successful goal attainment. Due to the fact that the present state is continuously compared to the existing standard, the identified discrepancy between present progress and standards leads to a change in effort investment.

Furthermore, if the effect of evaluating goal progress is understood as feedback in goal pursuing, an additional line of evidence can be found. Fishbach and Finkelstein (2012), for instance, pointed out that the feedback, either positive or negative, could increase the motivation for goal pursuit. Positive feedback increases motivation when it signals that the goal is valuable and the person is able to successfully pursue it. In addition, negative feedback increases motivation when it signals a discrepancy with the desired end state.

However, this raises the question of how continuing effort occurs after monitoring goal progress in the broader context of the source of motivation. In particular, how autonomous or controlled motivation is related to ongoing effort expenditure after monitoring goal progress, which serves as important feedback for ongoing goal pursuit. We expect that motivation is an important predictor of ongoing effort even in the phase of monitoring goal pursuits; and that this effect is mediated by perceived goal progress (additionally, in theory, either positive or negative feedback are plausible). Specifically, we hypothesize that our data will be in line with the simple mediation model proposing that perceived progress will account for the variance (or more colloquially will mediate the relationship) between self-concordance and effort expenditure, both cross-sectionally and longitudinally (H1). Additionally, we expect that self-concordance will be positively related to perceived progress (H2), and perceived progress will be related to effort (H3). As both directions are possible, a further corroboration of this issue is an additional aim of this study.
In order to corroborate the proposed relationships more thoroughly, three studies were conducted. The first pilot study was exploratory and aimed to corroborate the pattern of relationships and proposed model. Studies two and three aimed to replicate the results of the first study. They were confirmatory in nature and, therefore, pre-registered[1].

Study 1

In the first study, we aimed to corroborate the model which predicted that perceived progress would account for the variance between self-concordance and effort expenditure.

Method

Participants and procedure

The participants were 280 undergraduate students[2] (158 females, 122 males; aged M = 21.84, SD = 2.06)[3]. A non-probability sampling technique was used. Respondents were asked to think of one goal they were pursuing at that moment and complete the scales related to that goal.

Measures

Three-goal variables were examined– self-concordance, goal progress and effort (adapted from Koestner et al., 2002; Werner, Milyavskaya, Foxen-Craft, & Koestner, 2016). The instructions were: *„Personal goals are projects and intentions representing different spheres of life. We think, plan, realize them and sometimes we are successful in their attainment. Please, think of one that you are pursuing."* The participants listed goals such as "successfully graduate"; "find employment" and "start a family."

Goal self-concordance

Participants were asked to rate their motivation. External, introjected, identified and intrinsic reasons were measured by using four items rated on a scale from 1 (not at all for this reason) to 7 (completely because of this reason). The items were: *„striving because somebody else wants you to or because you will get something from somebody if you do"*, *„striving because you would feel*

[1] Pre-registration of data analysis and open data can be found at osf.io/4j8zf
[2] Given previous experience with this kind of study and resource restriction, the sample size was set to 200-300 participants. To justify this decision, a Monte Carlo Power Analysis for Indirect Effects was conducted. The power analysis indicated that 200 participants is enough to detect 80% of the model power when the correlation among the variables is at least of a medium magnitude (r=0.3).
[3] In all studies, pairwise deletion was used if some missing data have occurred.

ashamed, guilty, or anxious if you didn't strive for this", *„striving because you really believe it's an important goal to have – you endorse it freely and wholeheartedly"*, and *„striving purely because of the fun and enjoyment that striving provides you"*. The self-concordance index was calculated by deducting the sum of the external and introjected regulation from the sum of the intrinsic and identified regulation (Koestner et al., 2002)[4].

Goal progress

Goal progress was assessed by three items: *„I have made a lot of progress toward this goal"*; *„I feel like I am on track with my goal plan"*; *„I feel like I have achieved this goal"*. They were rated on a 1 (completely disagree) to 7 (strongly agree) scale. McDonald's ω was .723 for all three items. This was acceptable and therefore none of the items were dropped.

Effort

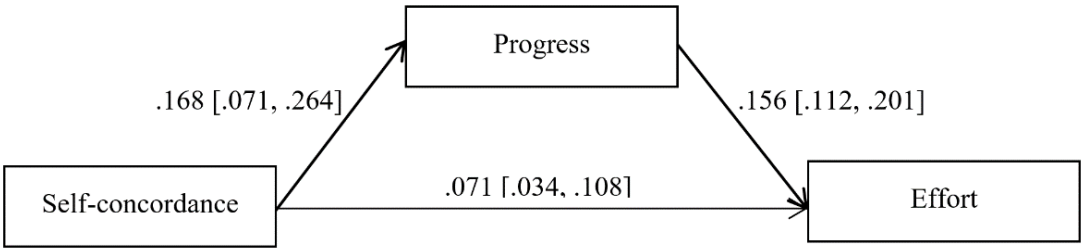
Goal effort was assessed using one item: *„I have tried really hard to achieve this goal"*. It was rated on a scale from 1 (completely disagree) to 7 (strongly agree).

Results

The Pearson´s correlation coefficient (see supplement) showed that all variables were positively correlated. In order to test whether goal progress accounted for the variance between self-concordance and effort, Process Macro v 2.16 for SPSS was used[5]. In the case that the 95 % confidence interval did not include 0, the effect was considered significant.

The simple mediation model was corroborated and the results indicated partial mediation. Perceived progress accounted for the variance between the self-concordance index and effort. The more self-concordant the goal was, the more the progress towards the goal was perceived and the more the effort that was put in. As illustrated in Figure 1, the direct effect of self-concordance on effort was significant (b = .071, SE = .019, 95 % CI [.034, .108]); and the indirect effect of self-concordance through goal progress on effort was significant (b = .026, SE = .009, 95 % CI [.011, .046]) as well. The total effect was (b = .097, SE = .020, 95 % CI [.058, .137]).

Figure 1 Mediation model (university students; 95 % CI)



[4] Due to fact that the self-concordance index captures four heterogenous types of motivation, we will not report the reliability of self-concordance as it is common practice.

[5] In the case that the 95% confidence interval did not include 0, the effect was considered significant (Hayes & Rockwood, 2016; Hayes, 2017). To calculate the lower and upper bounds of the confidence interval for the indirect effect, the bootstrap method was used with a number of bootstrap samples 10 000.

Discussion (Study 1)

The results of the simple mediation analysis have indicated that progress accounts for the variance between self-concordance and effort. The more self-concordant the goal was, the more progress was made and the more effort was put in. Nevertheless, to further corroborate the issue and eliminate alternative explanations, we aimed to conceptually replicate study one by varying the basic parameters.

For instance, there is a possibility that the observed pattern of results could emerge due to the specific manner in which the participants were instructed to think about their goals. In study one, participants thought about one idiosyncratic goal – "the goal that they are wishing to attain" and the area was not specified. While such an approach has some merits, potential pitfalls can also be identified. In addition, the instructions could prime participants to report only goals that are the most important. Thus, in the following study, we chose a more nomothetic approach. All participants were asked to think about one specific goal – an academic goal.

Secondly, the observed pattern of results could occur due to the specific operationalization of constructs; in study 1, effort was assessed by only one item, therefore, in the following study we used a more comprehensive scale with three items which were adapted from Nelissen, de Vet and Zeelenberg (2011).

Thirdly, the pattern of results that has been observed could have occurred due to the specific characteristics of the sample. We were, therefore, further interested if the same pattern of results would replicate in a different sample.

Study 2

Method

Participants and procedure

The participants were 191 high-school students (127 females, 63 males, 1 did not respond; aged M = 17.54, SD = 1.01). A non-probability sampling technique was used. In contrast to study one, respondents were asked to think of an academic goal – studying[6].

Measures

Goal self-concordance

Goal self-concordance was assessed in the same manner as in study 1.

Goal progress

Progress was operationalized by three items from Brunstein's (1993) scale. The scale consisted of: *"I have made a great deal of progress concerning this goal"*; *„I have had quite a lot of success in pursuing this goal"*; and *„many things have happened that have obstructed this goal"*. Items were rated on a scale ranging from 1 (completely disagree) to 7 (strongly agree). The reliability of the scale was McDonald's ω = .578. Due to the relatively low level of reliability, we analysed the "If one item is deleted score" which indicated better reliability if item three was dropped. As this omission can be justified (the third question regards obstacles in goal pursuit) as well as there being instances of using only two items in the literature (e.g. Uy et al., 2015), we worked with only two items in the consequent analysis. The McDonald´s ω (two items) was .707.

[6] This study was part of a bigger project related to goal dimensions.

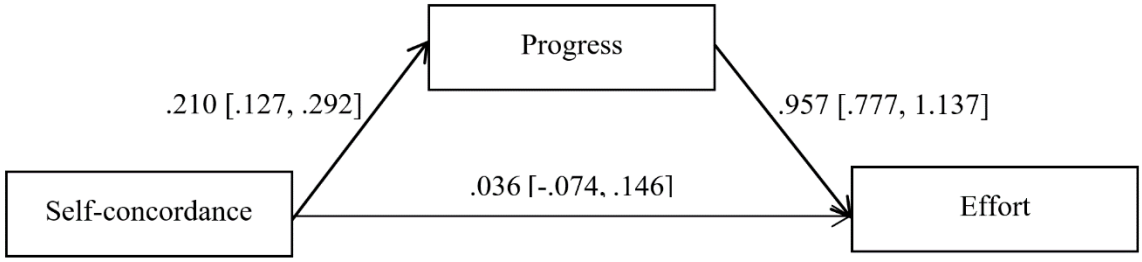
Effort

Effort was assessed by Nelissen et al.'s (2011) scale that consisted of 3 items: *"How much effort do you make to achieve your goal?"*; *"To what extent do you do your best to attain your target goal?", "How much energy do you spend achieving your goal?"* McDonald's ω was .891.

Results

As in the previous study, Process Macro v 2.16 for SPSS and the same inferential criteria were used. In the case that the 95 % confidence interval did not include 0, the effect was considered significant. Figure 2 illustrates the proposed model where full mediation occurred. Perceived progress accounted for the variance between self-concordance and effort. As depicted below, the direct effect of self-concordance on effort was not significant (b = .036, SE = .056, 95 % CI [-.074, .146]). However, the indirect effect of self-concordance through goal progress on effort was significant (b = .201, SE = .045, 95 % CI [.118, .296]). The total effect was (b = .236, SE = .066, 95 % CI [.106, .366]).

Figure 2 Replicated mediation number 1 (high-school students; 95 % CI)



Discussion dedicated to Study 2

The pattern of results from study 2 was in line with study 1. Self-concordance increases goal progress which in turn increases effort. Furthermore, progress accounted for the variance between the self-concordance index and effort. However, study two was conducted in the middle of a semester and it is therefore possible that the proposed pattern of results is specific for the time of measurement. Therefore, in the next study, measurements were carried out twice at two extreme time points: at the beginning of the semester and at the end of the semester[7].

Furthermore, rather than using age-heterogenous university students (study 1), or younger high school students (study 2); first year university students were used in this study. We rationalized that the first semester could be especially challenging.

[7] The rationale for analyzing two time points in addition to the longitudinal analysis conducted below is two-fold. Firstly, higher statistical power is achieved. Secondly, additional information related to the pattern of relationships at two time points is obtained. When these two measurements are in line with studies one and two and with the longitudinal analysis, it provides further evidence in line with the proposed model.

Study 3 (Time point 1)

Method

Participants and procedure

The participants were 245 first year university students[8] (222 females, 21 males, 2 did not respond; aged M = 19.62, SD = 1.50). A non-probability sampling technique was used. The study was conducted at the beginning of the semester during the first two weeks. As in study two, respondents were asked to think of an academic goal and complete the scales related to the goal[9].

Measures

The measures were the same as in the previous study[10].

Goal self-concordance

Goal self-concordance was the same as study one and two.

Goal progress

Progress was operationalized by the same three items as in study two (Brunstein, 1993). Similarly, as in study 2, the reliability of the three items was not sufficient and therefore only the first two items were used. For the two items, the McDonald's ω was .662.

Effort

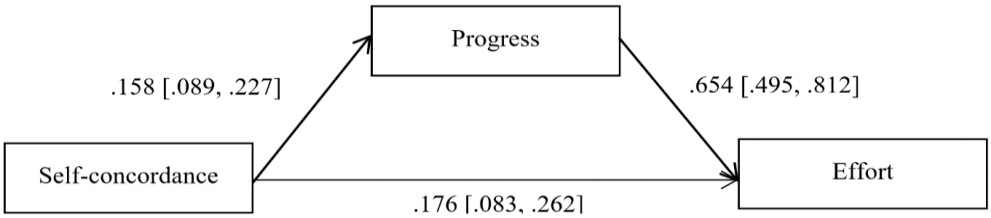
Effort was measured in the same manner as in study two. The McDonald's ω was .871.

Results

As in the previous studies, Process Macro v 2.16 for SPSS with the same inferential criteria was used. In the case that the 95 % confidence interval did not include 0, the effect was considered significant. Figure 3 illustrates the proposed model which indicates partial mediation. Progress accounted for variance between self-concordance and effort. As depicted below, the direct effect of self-concordance on effort was significant (b = .173, SE = .046, 95 % CI [.083, .262]).
The indirect effect of self-concordance through goal progress on effort was significant as well (b = .103, SE = .023, 95 % CI [.062, .153]). The total effect was (b = .276, SE = .049, 95 % CI [.179, .373]).

[8] The rationale for the sample size was the same as in previous studies.
[9] This study was part of a bigger longitudinal project related to goal dimensions.
[10] Except that a five-point scale was used.

Figure 3 Replicated mediation number 2 (first year university students; the beginning of the semester; 95 % CI)



Study 3 (Time point 2)

Method

Participants and procedure

The participants were 190 first year university students (167 females, 20 males, 3 did not respond; aged M = 19.72, SD = 1.334). A non-probability sampling technique was used. The study was conducted at the end of the semester during the last two weeks. As in study two and three, the respondents were asked to think of an academic goal and complete the scales related to the goal.

Measures

As in the previous studies, three-goal variables – self-concordance, goal progress and effort were examined. All three scales were measured in the same manner as in the previous study.

Goal self-concordance

Self-concordance was the same as in the previous studies.

Goal progress

As in the previous study, only two items were used. The McDonald's ω was .482.

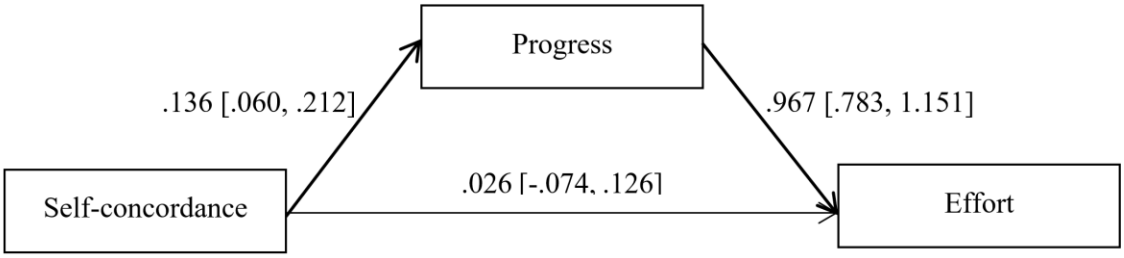
Effort

The McDonald's ω for effort was .875.

Results

Figure 4 illustrates the proposed model where full mediation occurred. Perceived progress accounted for the variance between self-concordance and effort. As depicted below, the direct effect of self-concordance on effort was not significant (b = .026, SE = .051, 95 % CI [-.074, .126]). However, the indirect effect of self-concordance through goal progress on effort was significant (b = .132, SE = .046, 95 % CI [.041, .222]). The total effect was (b = .158, SE = .061, 95 % CI [.037, .279]).

Figure 4 Replicated mediation model (first year university students; the end of the semester; 95 % CI)



Discussion dedicated to Study 3

The results of study 3 at both measurement points were in line with previous studies. This further corroborates the proposed model. However, analysis conducted so far was cross-sectional in nature and further directional predictions are not warranted. Therefore, we paired the first and second measurements and conducted a longitudinal analysis of the two measurements with an analytical procedure recommended by Hayes (2017).

Analysis of the longitudinal data from study 3

Method

Participants and procedure

The participants were 135 first year university students (124 females, 10 males, 1 did not respond; aged M = 19.5, SD = 1.31)[11][12].

Measures

Goal self-concordance

Self-concordance was measured in the same manner as in the previous studies.

Goal progress

As in the previous studies, the reliability for perceived progress was not sufficient and therefore a 2-item alternative was used. For the second measurement, the McDonald's ω was .469 and for the first measurement the McDonald's ω was .561.

Effort

For the second measurement, the McDonald's ω was .872 and for the first measurement, the McDonald's ω was .862.

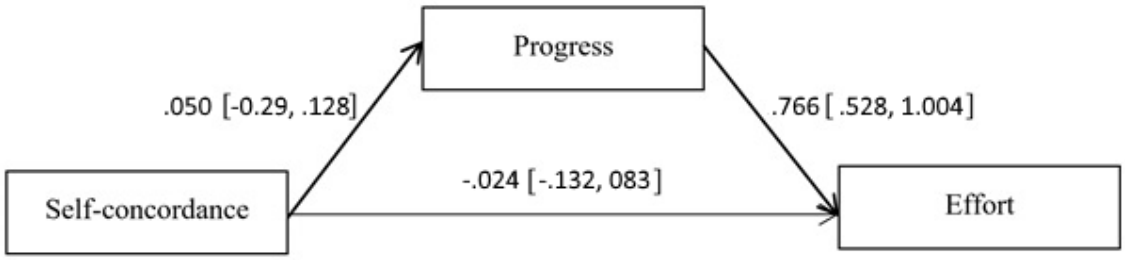
[11] Note that the data was paired from Time point 1 and Time point 2 of study three, according to the codes provided by the participants in both measurements. For pairing, only participants with the same code, gender, field of study and logically plausible age differences across both measurements were employed, leading to relatively high mortality.
[12] As in previous studies, we wanted to have sufficient power, although due to research mortality due to the pairing, the sample size and consequent statistical power are lower than in the separate analysis.

Results

In order to test whether goal progress mediated the relationship between self-concordance and effort in a longitudinal manner, Process Macro v 3.0 for SPSS was used with the same inferential criteria as before. In the case that the 95 % confidence interval did not include 0, the effect was considered significant. However, as recommended by Hayes (2017), in order to analyze the data from two time-points in a longitudinal manner, we modeled the later variables of Y and M while using lags (earlier measurements of Y and M) as co-variates.

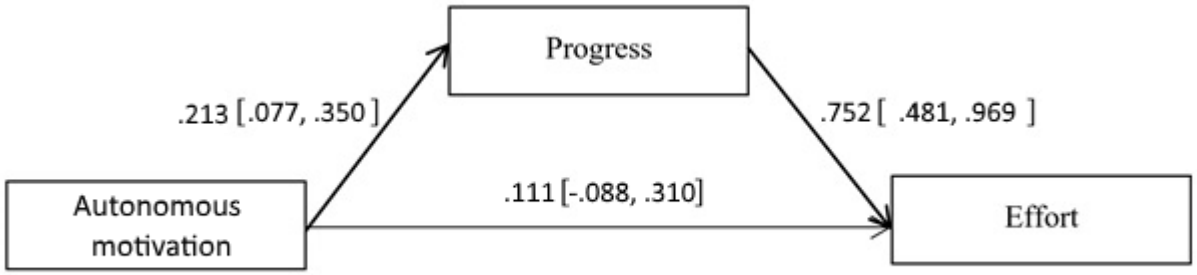
As depicted in Figure 5, mediation did not occur when using self-concordance index. When controlling for the first measurement of progress and effort, the direct effect of self-concordance on effort was not significant (b = -.024, SE = .054, 95 % CI [-.132, .083]). Nor was the indirect effect of self-concordance through goal progress on effort (b = .038, SE = .035, 95 % CI [-.031, -.107]). The total effect was (b = .014, SE = .062, 95 % CI [-.109, .136]).

Figure 5 Non-Replicated mediation model (first year university students; longitudinal data analysis; 95 % CI)



However, when analysing the autonomous and controlled motivations separately, as suggested by Koestner et al. (2008), full mediation occurred with the index of autonomous motivation. Specifically, as depicted in a Figure 6, perceived progress fully mediated the relationship between the variables. It accounted for the variance between the indicator of autonomous motivation in the first measurement and effort in the second measurement; controlling for effort and progress in the first measurement. The direct effect of self-concordance on effort was not significant (b = .111, SE = .101, 95 % CI [-.088, .310]) while indirect effect of self-concordance through goal progress on effort was significant (b = .155, SE = .062, 95 % CI [.039, .282]). The total effect was (b = .265, SE = .109, 95 % CI [-.050, .481). When the index of controlled motivation was used, mediation did not occur. The direct effect of self-concordance on effort was not significant (b = .100, SE = .070, 95 % CI [-,038, .238) and neither was the indirect effect of self-concordance through goal progress on effort significant (b = .014, SE = .044, 95 % CI [-.073, .102). The total effect was (b = .115, SE = .079, 95 % CI [-.042, .272).

Figure 6 Replicated mediation model with autonomous motivation only (first year university students; longitudinal data analysis; 95 % CI)



Discussion dedicated to the longitudinal analysis of Study 3

The results of the longitudinal analysis were in line with previous results; although only when the separate index of autonomous motivation was used. This is congruent with Koestner et al. (2008). Their research found that only autonomous motivation was related to the goal characteristics, namely to the goal progress. Furthermore, they advocated the need for a separate analysis of autonomous and controlled motivation as autonomous and controlled motivation was not "mirrored" (correlated negatively). Therefore, it is possible that in some situations (for example, when autonomous and controlled motivation are positively related) controlled motivation could contaminate the self-concordance index, suppressing the autonomous part of variance, and explains why mediation did not occur when the self-concordance index was used.

General discussion

In the present set of studies, we aimed to corroborate the model predicting that perceived progress would mediate the relationship between autonomous motivation (self-concordance) and following effort. In order to address this issue in more robust fashion, one pilot study and two additional confirmatory conceptual replications were conducted. These studies varied in a number of factors such as sample characteristics (heterogenous university students vs. high-school students vs. first-year undergraduate university students); operationalization of the scales (e.g. one vs. three items and various sources of scales); type of goals (idiosyncratic vs. nomothetic – academic goal); and design (cross-sectional vs. longitudinal).

It has been shown that perceived progress either partially (studies 1 and 3) or fully (studies 2 and 3) mediated the relationship between self-concordance and effort. Furthermore, the results of the longitudinal study corroborated this pattern of results, although only when the separate index of autonomous motivation was used.

Additionally, the present results have indicated that perceived progress was positively related to effort expenditure in all studies. This is in line with Fishbach et al. (2010) who have argued that positive feedback regarding progress could motivate consequent goal striving in some cases. This is also consistent with the idea echoed in the Small wins theory (Weick, 1984) where small wins could be motivating. Uy et al. (2015) recruited early stage entrepreneurs and analyzed their perceived progress and effort longitudinally. The participants were asked to provide ratings of perceived progress and effort in their natural environment on their mobile phones on a daily basis.

In line with the present results, it was shown that perceived momentary goal progress positively predicted consequent goal effort.

The motivational consequences of goal progress are also postulated in the theory of goal gradient hypothesis which states that people exhibit more effort when approaching the termination of their respective goal striving. For instance, Kivetz, Uminsky and Zheng (2006) found that perceived progress, even illusory, influenced consequent goal striving. In their study, the acceleration of purchases based on the proximity to earning coffee for a free was examined. The results showed that participants who received a bonus beforehand felt closer to the goal and finished the task faster in comparison to the control participants. Similarly, in their research, Nunes and Drèze (2006), documented a phenomenon which is manifested through an increase in goal effort - the endowed progress effect.

Moreover, the general prediction that subjective progress will influence effort is in line with Carver and Scheier's theory which proposes a feedback loop as a basic self-regulatory mechanism (Carver & Scheier, 2016). This theory predicts, based on a comparison with a reference point, that progress should lead to positive affect and consequently to the reduction of effort. This prediction is the opposite of what has been found in the present study.

However, a possibility for theoretical reconciliation exists. Firstly, for the feedback loop to operate, a crucial aspect is the reference point in the form of a standard that is set by an individual. Even though an increase in perceived progress is related to an increase in effort, this does not necessarily mean that participants meet their standards. It is hypothetically possible that higher effort has emerged due to fact that the feedback loop signaled by that criterion (regarding the present level of progress) has not been met and therefore an exhibited effort has increased.

Additionally, Fishbach et al. (2010) have pointed out that the influence of feedback on consequent self-regulated goal striving is more nuanced than expected. Indeed, the specific influence of positive or negative feedback depends on various factors such as the level of expertise. While negative feedback could be beneficial in skilled experts as it helps them correct the course of goal striving, positive feedback could be motivating for novices as it helps them bolster their commitment and adhere to a goal. Consequently, after positive feedback, effort could be bolstered.

In addition, it is widely assumed that effort, as a mental and physical activity, is a negative experience and that an individual tries to avoid it at all costs. Nevertheless, it has been recently proposed that effort can be related to the addition of the value to the activity (Inzlicht, Shenhav, & Olivola, 2018). According to Touré-Tillery and Fishbach (2014), people may enjoy the process of goal attainment and this positive experience may appear in greater effort (operationalized as persistence or as time spent on a task). This is crucial, considering that we were not interested in the relationship of progress and effort per se, but rather in their relationship to self-concordance and goals that are more or less congruent with the self of the individual. However, in order to address this, further research is necessary.

For future research, various extensions of the present study could be carried out. For example, Uy et al. (2015) found that besides the perceived level of progress, the variability of progress could be important as well. Given that self-concordance is related to long-term effort (Sheldon, 2014), progress variability could be an important measure that could be used in future research.

Furthermore, the present pattern of results does not grant that another variable cannot account for the variance between the proposed variables (Fiedler, Harris, & Schott, 2018). In fact, according to Fiedler et al. (2018), rather than saying that progress mediates the relationship between self-concordance and effort, it is safer to say that progress accounts for the variance between self-

concordance and effort. Indeed, other models which propose different mediators are plausible and therefore worthy of further examination.

Despite attempting rather extensive corroboration, a true causal nature of the proposed variables is not warranted as mediation analysis based on cross-sectional data cannot provide a definitive answer regarding the directionality (Fiedler et al., 2018; Preacher, 2015). In this case, one could propose reversing the proposed direction (X-Y-M) and consequently comparing the two models in terms of a better model fit. However, as the results could be misleading, this seems rather problematic (Lemmer & Gollwitzer, 2017). As stressed by Lemmer and Gollwitzer (2017), when M has a lower reliability than Y (as in the present case), reversing the proposed causal chain X-Y-M is not recommended. Alternatively, two solutions were employed. Firstly, the present statistical mediation analysis was based on a theoretical analysis assuming that: *"If a causal model is assumed, then a prediction derived from that causal model can account for a substantial part of the variance in a certain study context"* (Fiedler et al., 2018; p. 100). This reflects that while alternative models could be theoretically and computationally plausible, their corroboration is beyond the scope of the present study.

Secondly, to address if the proposed model is plausible, a longitudinal analysis was conducted. The proposed model was in line with the data (although only with the separate index of autonomous motivation). Nevertheless, to further corroborate the causal relationships, more measurement points and/or experimental investigations are welcome in future research. For instance, a priming manipulation of *have to vs. want to* motivation could be used, as was used by Leduc-Cummings, Milyavskaya and Peetz (2017). They used manipulation where participants were instructed to write down why they should (have-to condition) or want to (want-to condition) carry out their goal. Furthermore, various designs concerning experimental mediation could be used (Pirlott & MacKinnon, 2016).

Additionally, regarding causality, common causes could exist. For instance, as pointed out by a reviewer, it is possible that progress and effort could not be causally linked but they are both caused by another variable such as self-regulation. Therefore, a further, more complex, examination is necessary.

Moreover, for future research, alternative operationalizations and objective data could be used. This seems to be especially promising, considering the less conscious aspect of self-regulation. For instance, although these theories have been highly questioned in recent years, some accounts have proposed that goals could be activated and operate (more or less) non-consciously (e.g. Huang & Bargh, 2014; for a recent review see e.g. Kačmár & Lovaš, 2018).

In short, and despite some limitations, we have found and replicated an interesting pattern of results. In two cross-sectional and one longitudinal studies, we found that the model predicting that perceived progress accounts for the variance (or more colloquially mediates the relationship) between self-concordance and effort is in line with our data and therefore has some degree of verisimilitude. This pattern of results not only fills the existing gap in the literature but encourages future research and potential application. For instance, echoing Goal-setting theory (Locke & Latham, 1990), instead of proposing a general and poorly specified goal, one, preferably, should set a higher amount of smaller, feasible goals, where progress on a day to day basis can be traced; especially considering internal reasons for goal attainment.

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Supplement

Table 1
Correlations among variables

	Variable	M	SD	1.	2.	3.
Study 1	1. Self-concordance	4.73	4.32	–	.201***	.282***
	2. Progress	12.54	3.60		–	.418***
	3. Effort	5.33	1.50			–
Study 2	1. Self-concordance	2.11	3.92	–	.342***	.253***
	2. Progress	9.67	2.40		–	.639***
	3. Effort	14.70	3.67			–
Study 3 (Time point 1)	1. Self-concordance	1.95	3.06	–	.280***	.340***
	2. Progress	6.69	1.73		–	.516***
	3. Effort	11.34	2.49			–
(Time point 2)	1. Self-concordance	1.71	2.87	–	.251***	.185*
	2. Progress	7.12	1.66		–	.605***
	3. Effort	11.14	2.46			–
(Longitudinal data – Self-Concordance index)	1. Self-concordance	2.18	3.03	–	.206*	.130
	2. Progress (2nd measurement)	7.21	1.51		–	.578**
	3. Effort (2nd measurement)	11.40	2.27			–
(Longitudinal data – Controlled motivation only)	Controlled motivation	5.67	2.06	–	.014	.100
	2. Progress (2nd measurement)	7.21	1.51		–	.578***
	3. Effort (2nd measurement)	11.40	2.27			–
(Longitudinal data - Autonomous motivation only)	1.Autonomous motivation	7.75	1.77	–	.392***	.354***
	2. Progress (2nd measurement)	7.21	1.51		–	.578***
	3. Effort (2nd measurement)	11.40	2.27			–

Note. * p < .05. ** p < .01. *** p < .01.

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Creating the "Aspects of Presenting Alcohol Related Posts on Facebook" Methodology for College Students

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Abstract:
Background: Social networks, in particular Facebook, are part of the lives of almost every individual, and in addition to searching for people, making friends or communicating, they also enable self-presentation (photos, statuses, videos). Part of this, especially among young people, may be the presentation of risky forms of behavior (e.g. alcohol consumption) that may have direct (attitudes) or indirect (normative beliefs) effects on behavior. It has been found that contributions presenting alcohol use reinforce subsequent risk consumption in individuals who have seen such contributions. This is explained by the social pressure to conform to a certain type of behavior which is most often represented by friends who self-present and self-reveal on Facebook what they prefer (such as alcohol consumption and parties). Such a link between Facebook and alcohol is therefore elaborated in theory and quality. However, there is no known methodology from the literature to address the link.
Objective: The aim was to prepare a methodology measuring the interconnection of Facebook and alcohol for the purposes of further investigation of the issue in the context of significant socio-psychological factors.
Methods: A questionnaire consisting of socio-demographic variables (gender, age, university, year of study) and 38 items related to Facebook and alcohol linkage; which were: a) taken from conducted research (Alhabash et al., 2016); b) derived from the outlined topics (Huang et al., 2014; Westgate et al., 2014; Rodrique et al., 2016; Hutton et al., 2016; Barnes et al., 2016), which were qualitatively elaborated on through discussion in focus groups; c) supplemented by items that logically lacked and complemented the examined context (concerning the individual themselves and their contribution to Facebook, the general contribution of friends, the descriptive norms, and the truthfulness of the presented contributions on Facebook). The respondents' task was to mark on the five-point Likert scale the extent to which they agree or disagree with a given statement (1 - strongly disagree; 5 – strongly agree).
Research sample: The research sample consisted of 160 college students from Pavol Jozef Šafárik University (66.3%; n = 106) and Prešov University (33.8%; n = 54) (86.9% of women; M = 21.20; SD = 1.44). The respondents came mainly from the second and third year of study. The selection of the research sample was made on an occasional basis. The basic criterion for data collection was the willingness of both teachers and university students to participate in research. The response rate was 60%. Data collection was carried out at the beginning of 2016. Data analysis: Factor analysis (principal axis factoring) was used to reduce the number of items and reveal the factor structure of our methodology. Individual items were used for statistical analysis. Within the factor analysis, we followed the individual criteria for assigning items to the extracted factors: a) the correlation matrix's own numbers greater than 1; (b) factor charge of items with a minimum value of 0,5; (c) discarding items which have at least two saturation values ≥ 0.3; (d) discarding items that were conceptually unacceptable; e) The minimum number of items in the factor had to be 3.
Results: Overall, factor analysis was performed three times due to the gradual exclusion of items due to failure to meet the criteria for inclusion in the factor. In the first step of the factor analysis, 11 factors were revealed, the

scree plot revealed a fourth factor break. However, 19 items were excluded based on non-compliance. In a second step, the principal axis factoring analysis with oblimin rotation was repeated to eliminate the excluded items and pointed to the existence of 6 factors. The scree plot revealed a break after the second factor. An additional 10 items were excluded based on non-compliance. In the third step, the principal axis factoring with oblimin rotation was repeated without excluding items and revealed the existence of 3 factors explaining 31.26%; 11.03% and 5.71% variance. The Scree plot pointed to the second-factor break. 4 items were excluded based on non-compliance (two items had eigenvalue less than 0.5; one factor contained only 1 item, one item logically explained a better second factor, but its factor charge for the second factor was low). Other items have defined and explained adequately extracted factors. The result was 2 factors. The first factor was named as the attractiveness of the alcohol related post (motivation to use alcohol after seeing a Facebook post with alcohol) and consisted of 3 items. The alpha coefficient was 0.87. The second factor was named the incidence of alcohol related Facebook posts of friends and consists of 3 items. The alpha coefficient is 0.74.
Limits: cross-sectional data collection design, occasional sampling limited by teachers' willingness to participate in data collection; the prevailing number of women in the research sample.
Conclusion: The result of the statistical analysis is the methodology of "Aspects of Presenting Alcohol Related Posts on Facebook", consisting of 6 items that represent 2 factors. We recommend re-validating the developed methodology and its subsequent use in the context in relation to other socio-psychological factors.

Keywords:
Facebook. Methods. Students. Alcohol. Factor analysis.

Introduction

The Internet began to develop rapidly since its creation in the early 1990s. Currently it is an integral part of everyday activities (Šmahel, 2003; Wang and Li, 2015) especially among young people (Buckingham, 2013), who are called "the online generation" (Dušková and Vaculík, 2002). Preferred online activities include the use of social networks (Wang and Li, 2015; Livingstone and Haddon, 2011); with Facebook being one of the biggest. It allows for mutual exchange of social information across small and long distances amongst friends, family, colleagues and strangers using pictures, statuses or messages (Matook, 2015). It also serves to create profiles and friendships, finding people, self-presentation or self-discovery and interaction with others (Steinfield, Ellison, and Lampe, 2008; Ellison, Steinfield, and Lampe, 2007). The level to which we reveal ourselves using our own profile, pictures, statuses or videos are the key components the users utilise to show, present or captivate (Gregussová, Tomková, and Balážová, 2010). This fact is linked to positive as well as negative consequences. Facebook presents a carefree, relaxed atmosphere, with a certain degree of anonymity and social support. This social support is mostly appreciated by individuals, who cannot find it in another form or they are misunderstood or isolated in their own environment (Šmahel, 2003). Likewise, Facebook can be an adequate socializing tool serving to create new and maintain old friendships (Brown and Gregg, 2012 in Barnes, McCreanor, Goodwin, Lyons, Griffin, and Hutton, 2016). On the other hand, Facebook can also have a negative impact; such as in the area of personal body perception, which can lead to an increased incidence of physical image disorder (Meier and Gray, 2014). An exemplary paradox of using Facebook can be seen in connection to risky behavior forms. Facebook and the Internet can be used to spread intervention strategies focused on reducing the incidence of risky behavior; such as alcohol consumption (providing normative feedback; Lewis and Neighboors, 2006; Berkowitz, 2004; LaBrie, Hummer, Grant and Lac, 2010). On the other hand, Facebook posts linked to alcohol use can support this risky behavior, which can be influenced directly (e.g. by creating a positive attitude; Alhabash, McAlister, Quilliam, Richards and Lou, 2015; Barnes et al., 2016) or indirectly (e.g. by creating normative convictions; Rodriguez, Litt, Neighbors and Lewis, 2016; Alhabash et al., 2015; Miller, Prichard, Hutchinson and Wilson, 2014) of the affected individuals.

Facebook and Alcohol Consumption

Facebook and alcohol are no doubt constructs used extensively among young people and college students. Research shows that 98% of college students have an active Facebook profile and that an average college student uses Facebook at least 30 minutes a day (Rodriguez et al., 2016). The highest prevalence of alcohol consumption is among college students (Stone, Becker, Huber and Catalano, 2012; Menagi, Harrell, and June, 2008), where 44% of US college students (Wechsler, Lee, Kuo and Lee, 2000), 40% of UK college students (Dantzer, Wardle, Fuller, Pampalone and Steptoe, 2006) or up to 66% of Slovak college students (Šebeňa, Mikolajczyk, and Orosová, 2009) engage in risky alcohol consumption. It is also pointed out that 20% of those who start college start to consume alcohol and for others starting college represents a transition from experimenting with alcohol to excessive consumption (Moreno, Cox, Young and Haaland, 2015). The above-mentioned research points to its considerable incidence especially among college students.

Today, there is a considerable link between these two widely spread "activities". Researchers are beginning to deal with the question as to what extent alcohol consumption is presented on social networks, including Facebook. They also examine what impact this may have on other behaviors of the individual or other related variables, such as attitudes (Alhabash et al., 2015; Barnes at al, 2016), normative convictions (Huang, Soto, Fujimoto and Valente, 2014; Alhabash et al., 2015), and identity (Rodriguez et al., 2016). Several authors point out that the sharing and relaying of experience with alcohol use strengthens the subsequent risky consumption (Barnes et al., 2016). Some even add that the biggest social pressure towards a certain type of behavior is friends or peers, who present or reveal on Facebook what they like (Cavazos-Rehg, Krauss, Sowles and Bierut, 2015; Barnes et al., 2016). These often include wild parties or evenings, which include alcohol consumption, that lead to an increased intention towards or actual alcohol consumption (Cavazos-Rehg et al., 2015). This social pressure is based on the fact that young people perceive Facebook presentation as a real image of alcohol consumption or an effort to strengthen social status (Barnes et al., 2016). This statement is also confirmed by the finding that individuals with a larger network of friends are more likely to consume alcohol than those with a smaller network (Vlková, 2011). Research also shows that presentation of alcohol or its consumption (statuses, comments, pictures) on Facebook is positively linked to all alcohol consumption indicators (Rodriguez et al., 2016) for example to: (a) frequency of consumption (Cavazos-Rehg et al., 2015); (b) intention to drink (Westgate, Neighbors, Heppner, Jahn, Lindgren, 2014); (c) excessive drinking (Moreno et al., 2015) and; (d) negative consequences or problems linked to alcohol consumption (Barnes et al., 2016). However, this link is not as direct and posting a picture or a post or a video with alcohol does not lead any given individual to automatic and immediate alcohol consumption. We assume that this relationship is mediated or affected by other major factors and variables; like self-regulation, normative convictions, motivation, own identity, and attitudes.

Despite existing research, it is still an area of exploration which is relatively new and where certain methodology examining this connection between Facebook and alcohol is missing. The existence of this methodology would make it possible to examine this link also in the context of other variables. However, such methodology is not known from the literature we have studied. We have searched for research on this issue using the Scopus, Web of Science and ProQuest databases using these key words: Facebook, social sites, and alcohol. There is a lot of research dealing with given constructs individually. There is less research that links them in such a way as suggested above. In the next section we will point out the most common way of examining this construct in the found research.

Research Methodology of Linking Alcohol and Facebook in View of Developing New Methodology

The authors use different ways of acquiring information about this link. These include qualitative analyses (e.g. Barnes et al., 2016), telephone or personal interviews (Moreno et al., 2015; Hutton, Griffin, Lyons, Niland and McCreanor, 2016), experiments (Alhabash et al., 2015) or questionnaires consisting of items created by themselves (Alhabash et al., 2015). However, we can summarize that qualitative analyses analyzing conversations and discussions in focus groups are more prevalent. We have rarely encountered specifically formulated items that could be used in developing a methodology.

Barnes et al. (2016) examined drinking practices occurring while individuals are online through using focus groups. Discussions that lasted 1 - 2 hours showed several areas that were summarized in two behavioral patterns: 1) individuals drink when they are not online and get intoxicated online; 2) individuals are online and start consuming alcohol while online. According to the participants, both behavioral types represent social behavior linked to joy and identity that appeared in sharing this behavior. The discussions mentioned several processes linked to this, such as engaging, planning, initialization, recording of pictures and videos and commenting on these occasions. The discussions included also terms like *fun from conversation* and *building group cohesion*. There were also various positive and sometimes negative assessments of presenting Facebook posts with alcohol (these topics were an inspiration for compiling items.)

Hutton et al. (2016) conducted a similar qualitative analysis of the discussions through focus groups. The discussions dealt with young women's drinking practices and use of Facebook. The focus group discussions lasted from 1 to 2 hours and were conducted with eight groups involving 36 participants aged 18–25 years. Three key themes were identified: "tragic girls" and "crack whores"; "drunken feminists"; and "Facebook, alcohol and drunken feminists". As in the previous study, there were different positive, but especially negative assessments of presented Facebook posts with alcohol with women, which significantly impact the perception of their femininity (also these topics were an inspiration for compiling items). These opinions and assessments largely overlapped with the findings of Barnes et al. (2016). Therefore, in developing the methodology we have focused mainly on those that were not yet mentioned. The discussion included opinions that people are boasting about posting pictures with alcohol on Facebook and that by sharing alcohol posts on Facebook they can form an opinion about the person.

Rodrigues et al. (2016) also used qualitative analysis when they analyzed 100 posts in a specific timeline. The posts were assessed in terms of alcohol-related content. They have also used quantitative analysis and analyzed the drinking identity of these posts. We were inspired by this construct. However, the Alcohol Self-Concept Scale methodology consisting of five statements has a more general character and therefore we only took inspiration from it for our focus on Facebook. This methodology examines what role alcohol consumption plays in the personality of the individual, lifestyle and perception of others.

Compared to others, Alhabash et al. (2015) used an experiment to examine how evaluations of alcohol marketing status updates, and displayed advertisements predict social media users' intentions to consume alcohol. These authors presented 24 advertisements and 6 alcohol-related statuses to the respondents in different variations and experimental conditions. Subsequently, the respondents completed an online survey focused on their attitudes, behavioral intentions, and the intention to consume alcohol; from which we took some relevant methodology items that the author created themselves and which they used to determine the intent to consume alcohol (4 items). The authors discovered that consumption intentions are higher when participants' attitudes toward alcohol status updates and their behavioral intentions toward status updates (e.g., intentions to like, share, and comment on) are more positive. These items

inspired us to consider the motivation for alcohol consumption and contributed to the creation of other items of our methodology.

Other authors who created their own survey questionnaires include Westgate et al. (2014). The Facebook Alcohol Questionnaire assesses the degree to which participants post and view alcohol-related content on Facebook. The survey included 10 items. Four items were general and determined only whether the participants have an active Facebook account and how many friends they have (Facebook, real-life and close). The next six items asked participants to report how often they post alcohol-related content on Facebook (including status updates, comments, and pictures of themselves or others) and how often their Facebook friends post this alcohol-related content on Facebook. These items inspired us, since they were asking the phenomenon that was occurring. We rephrased their statements regarding an individual and his or her activities linked to posting alcohol-related posts on Facebook.

Huang et al. (2014) formed in his own research items that were more general and broader. Because of this reason we have divided and adjusted them into several items based on our consideration. These were friends related items: 1) posted pictures of themselves partying or drinking alcohol online; 2) talked about partying online.

As can be seen in this review of qualitative analyses and self-made questionnaires, there is no unified examination of this link. Qualitative analyses provide a deeper view and understanding of a given issue, however, they don't allow for an examination of multiple respondents (the processing would be difficult) or examining the relationships to other variables, which no doubt play important roles (e.g. normative convictions, identity, motivation). Further limitations of individual studies have been suggested in specific studies with highlighting the way they have influenced us in preparing our own items.

Additionally, the items created by the authors to examine the link between alcohol and Facebook lack focus on several areas associated with them. The authors focus either only on a positive or negative assessment of a given activity (Barnes et al., 2016) or only on the activity of friends (Huang et al., 2014). Therefore, it would be best to combine them to cover multiple areas. It is also important to underline the most important component at play here; namely, descriptive standards. Friends represent the biggest social pressure also for risky behavior, which alcohol consumption undoubtedly is. Behavior they present on Facebook affects many other individuals. Often this is underlined by the fact that young people consider Facebook posts as a real picture of alcohol consumption. In this context we consider it necessary to add further items, which would focus specifically on this area (friends, truthfulness of Facebook information).

Goal

The goal was to prepare methodology measuring the link between the Facebook and alcohol constructs for the need of further examination of this topic in the context of major social-psychological factors.

Methods

Research Sample and Procedure

The research data was acquired using a paper version of the questionnaire at the beginning of 2016. The research consisted of 160 college students (86.9% women; $M_{age} = 21.20$; SD = 1.44), who attended the Pavol Jozef Šafárik University in Košice (66.3%; n = 106) and the Prešov University in Prešov (33.8%; n = 54). The respondents were mainly from the second and third study year (study year: first [23.8%; n = 38]; second [37.5%; n = 60]; third [36.3%; n = 58]; fourth [0%; n = 0]; fifth [2.5%; n = 4]).

The selection of the research sample was made based on random selection. All college students available in individual lessons of teachers who agreed to data collection were contacted (response rate 60%). For this reason, the basic criterion of data collection was the willingness of the teachers and the students to participate in the research.

Methodology

The following variables were monitored within the **socio-demographic indicators**: gender (man / woman), age, university (PJŠU / PU[1]), and study year (first – fifth).

Methodology measuring the link between Facebook and alcohol – a methodology consisting of 38 items (statements) was developed. The development we preceded by studying all of the available literature dealing with this issue (link between Facebook and alcohol). We have found no methodology in this review that would examine this link. Individual authors used questionnaires created by them to collect data, or they summarized areas and topics that were discussed in focus groups. This is why we have applied a double approach. The first represented a literal adoption and translation of relevant items from the questionnaires created by the authors. These items were translated in two independent translations into the Slovak language. Subsequently they were translated back into the English language and compared with the original items. The items were not modified in any way. The second approach consisted of creating "derived" items based on questions, topics or areas that were discussed in specific research in the focus groups. This means that if there was a topic within the focus groups dealing with positive and negative assessment of alcohol related posts on Facebook, we have created several items corresponding to the discussed topic. A summary of the adopted and derived items used in the created methodology is listed in Table 1. After examining and considering the adopted items, these items were amended by additional own items (questionnaire items: 5, 10, 21, 22, 23, 35, 36), which were (logically) missing and complemented the examined context. Items 5 and 35 were added based on the research of Westgate et al. (2014), who examined one's own sharing of alcohol post and sharing of these posts by friends. However, they did not cover the information if the individual posted these posts on Facebook of his or her own (item 5) and if friends post any alcohol related posts on Facebook, even those that are embarrassing (item 35). Items 10, 21, 22 and 23 complete the set of items related to descriptive standards that act as a key component affecting alcohol consumption. So, these items deal with the fact whether there are a lot of these alcohol related posts on Facebook (item 10) and whether they are curious if their friends add these posts (item 21) and thus consume alcohol during the weekend (item 22) or during the week (item 23). Lastly, the impact of descriptive standards is so great because the individuals feel that what their friends present on Facebook is truthful, which was considered in another item (item 36).
This is how the Slovak version of the methodology examining the link between Facebook and alcohol was created, consisting of 38 items (statements). The respondents' task was to mark on the five-point Likert scale the extent to which they agree or disagree with a given statement (1 – strongly disagree; 5 – strongly agree). This methodology is shown in Table 2. We were aware of the fact that many items significantly overlap contextually or they were trying to determine the same thing in a different way. However, we did not consider this to be a limitation, since these items are cleaned up in the planned statistical analysis. Individual items were used for statistical analysis.

[1] Pavol Jozef Šafárik University / Prešov University

Table 1 Adopted and Derived Items Used in the Developed Methodology

	Items (Number in Questionnaire)		
Research	**Adopted**	**Derived**	**Concerning**
Alhabash et al., 2016	6, 7, 12	19, 20	Intention to consume A
Huang et al., 2014		8, 13, 15, 16, 24, 27, 28, 38	Share posts with friends
Westgate et al., 2014		1, 8, 3, 4, 5, 13, 15, 16, 25, 37, 38	Share posts – own and friends'
Rodrique et al., 2016		32, 34	Creating identity
Hutton et al., 2016		18, 33	Occurrence and creating opinion on others
Barnes et al., 2016		2, 9, 11, 14, 17, 26, 29, 30, 31	Positive / negative assessment of posts with A

Note: A = alcohol; FB = Facebook

Table 2 Methodology Measuring the Link between Facebook and Alcohol

		Statement: 1- Completely disagree 5 - Completely agree				
1.	A lot of people share alcohol related Facebook posts in my community.	1	2	3	4	5
2.	I see no problem in sharing alcohol related Facebook posts.	1	2	3	4	5
3.	I have never shared an alcohol related post.	1	2	3	4	5
4.	I post an alcohol related post on Facebook after the event.	1	2	3	4	5
5.	I like to share alcohol related posts on Facebook.	1	2	3	4	5
6.	When I see an alcohol related post, alcohol sounds more appealing.	1	2	3	4	5
7.	When I see an alcohol related post, I want to go drinking.	1	2	3	4	5
8.	None of my friends share alcohol related posts.	1	2	3	4	5
9.	When I see one of my friends sharing a picture where they drink, I'm angry with him or her.	1	2	3	4	5
10.	I encounter alcohol everywhere on social networks.	1	2	3	4	5
11.	I believe that alcohol helps people to connect.	1	2	3	4	5
12.	When I see an alcohol related status, I always want to drink more.	1	2	3	4	5
13.	My friends post party related posts on Facebook.	1	2	3	4	5
14.	I believe posting my friends and myself with alcohol on Facebook makes myself more attractive and popular.	1	2	3	4	5

15.	The prevailing number of my friends' pictures is from events with alcohol.	1	2	3	4	5
16.	Posting Facebook posts from events with alcohol is a popular activity of my friends.	1	2	3	4	5
17.	I believe that presenting alcohol on Facebook has a negative impact.	1	2	3	4	5
18.	Everyone around me brags about their pictures with alcohol.	1	2	3	4	5
19.	Alcohol related Facebook posts motivate me to drink.	1	2	3	4	5
20.	I want to drink when my friends share alcohol related posts on Facebook.	1	2	3	4	5
21.	I am curious about which of my friends posts that he or she is drinking.	1	2	3	4	5
22.	I am curious about which of my friends drink during the weekend.	1	2	3	4	5
23.	I am curious about which of my friends drink during the week.	1	2	3	4	5
24.	My friends who are about to go drinking post a status about this on Facebook.	1	2	3	4	5
25.	I post an alcohol related Facebook status after an event.	1	2	3	4	5
26.	Friends posting alcohol related Facebook posts are more interesting to me.	1	2	3	4	5
27.	My friends who are about to go drinking post about this on Facebook.	1	2	3	4	5
28.	My friends who are about to go drinking post a video about this.	1	2	3	4	5
29.	Friends sharing alcohol related Facebook posts are more social.	1	2	3	4	5
30.	Facebook is a good way of organizing a meeting.	1	2	3	4	5
31.	Facebook is a new way to visual share alcohol related experience.	1	2	3	4	5
32.	My community highly rates alcohol related Facebook posts.	1	2	3	4	5
33.	I can form an opinion based on sharing alcohol related Facebook posts.	1	2	3	4	5
34.	Using Facebook, I can create my own version of identity, which includes alcohol related posts.	1	2	3	4	5
35.	My friends tend to share embarrassing posts from events with alcohol.	1	2	3	4	5
36.	I consider Facebook information to be truthful.	1	2	3	4	5
37.	I personally share alcohol related Facebook statuses.	1	2	3	4	5
38.	My friends share alcohol related Facebook statuses.	1	2	3	4	5

Statistical Analysis

The principal axis factoring method was used to reduce the number of items and to reveal the factor structure in the methodology we have constructed. Before the actual principal axis factoring, we have evaluated the suitability of the data for given statistical analysis. The correlation matrix revealed the presence of many coefficients ≥ 0.3. The Kaiser-Meyer-Olkin (KMO) test reached a value of 0.782 (recommended value min. 0.6). The Bartlett's test of sphericity reached statistical significance ($\chi 2 = 3368.91$; $df = 703$; $p < 0.001$), which means that all conditions for using factor analysis have been meet. We have followed the following criteria for assigning items to the extracted factors in our factor analysis:

- own correlation matrix values (i.e. eigenvalues) greater than 1 (Pallant, 2007)
- factor charge of items must have reached a value of at least 0.5 (Tourangeau and McGilton, 2004)
- excluding items from a factor, if they reached saturation value ≥ 0.3 in at least two factors (Tourangeau and McGilton, 2004)
- excluding items that were conceptually unacceptable, i.e. they did not make sense from a conceptual perspective and did not allow the interpretation of the factor (Tourangeau and McGilton, 2004)
- the minimum number of items in given factor must have been at least 3 (Pallant, 2007)

The extracted factors have been named by three experts, who have agreed on the naming of the factors content-wise and chosen the best alternative for naming a given factor based on a mutual discussion.

Results

Overall, the factor analysis has been performed three times due to gradual exclusion of items because of failure to meet the criteria for their inclusion in a given factor. Therefore, the results section will describe the individual steps.

Step 1

The principal axis factoring analysis (factoring method based on principal axes with the rotation of non-orthogonal factors) revealed 11 factors with eigenvalues greater than 1. These factors demonstrated: 25.00%; 8.60%; 5.55%; 4.10%; 3.51%; 3.10%; 2.55%; 2.48%; 1.91%; 1.82% and 1.56% variations. Scree plot graph revealed a break after the fourth factor. The factor charges of sixteen items (1, 2, 3, 4, 8, 10, 11, 13, 14, 18, 24, 28, 30, 32, 35, 38) was less than 0.5 and the items were therefore excluded. Three items (12, 23 and 26) moderately saturated 2 different factors and were therefore excluded as well.

Step 2

Based on the previous principal axis factoring analysis, the factoring method has been repeated, based on principal axes with the rotation of non-orthogonal factors without the excluded 19 items, which revealed the existence of 6 factors with eigenvalue greater than 6. These factors demonstrated: 25.29%; 8.91%; 6.17%; 4.99%; 3.23% and 2.79% variations. Scree plot graph revealed a break after the second factor. The factor charges of seven items (9, 17, 25, 29, 31, 34, 36) was less than 0.5 and the items were therefore excluded. Three items (5, 19, 21) moderately saturated 2 different factors and were therefore excluded as well.

Step 3

The principal axis factoring analysis with the rotation of non-orthogonal factors has been repeated without the excluded 10 items, which revealed the existence of 3 factors with eigenvalue greater than 1. These three factors demonstrated: 31.26%; 11.03% and 5.71% variations. The scree plot revealed a break after the second factor. The eigenvalue of two items (33 and 37) was less then 0.5 and the items were therefore excluded. One factor contained only a single item (4), which could not have been logically linked to another factor based on its interpretation and therefore this item was excluded. One item of the first factor (22) logically explained and completed better the second factor. However, its factor charge for the second factor was low and therefore this item was excluded as well. Other items adequately defined and explained the extracted factors. Table 3 shows the assignment of items to factors. The factors were named: (1) the attractiveness of the alcohol related post (motivation to consume alcohol after seeing the alcohol related Facebook post), which included 3 items, (6, 7, 20). The alpha coefficient for these three items was 0.87 - indicating a relatively high internal consistency of the items; (2) the incidence of alcohol related Facebook posts of friends, which included 3 items (15, 16, 27). The alpha coefficient for these items is 0.74 - again indicating a relatively high internal consistency of the items.
The developed methodology was named "Aspects of Presenting Alcohol Related Posts on Facebook" and consists of 6 items that represent 2 factors.

Table 3 Factor structure of methodology measuring the aspects of presenting alcohol related posts on Facebook"

Items	Factor		
	1	2	3
20. I want to drink when my friends share alcohol related posts on Facebook.	**.882**		
6. When I see an alcohol related post, alcohol sounds more appealing.	**.725**		
7. When I see an alcohol related post, I want to go drinking.	**.717**		
**22. I am curious about which of my friends drink during the weekend.	.578	0.352	
**37. I personally share alcohol related Facebook statuses.	.321		
15. The prevailing number of my friends' pictures is from events with alcohol.		**.740**	
27. My friends who are about to go drinking post about this on Facebook.		**.709**	
16. Posting Facebook posts from events with alcohol is a popular activity of my friends.		**.702**	
**33. I can form an opinion based on sharing alcohol related Facebook posts.		.129	
**4. I post an alcohol related post on Facebook after the event.			.533

Note: ** excluded items

Discussion and Conclusions

The goal of this paper was to create methodology that would examine the link between two major areas - alcohol and Facebook. If we look at them from the perspective of being influenced by others (descriptive standards) in the context of developing risky behavior (alcohol consumption), their link is in reality quite clear. The Facebook online environment greatly facilitates this negative influence on risky behavior, since today everything that is presented publicly and by one's friends is considered to be truthful. This in turn affects the thinking and action of the concerned individual. Although this is a topic which is well developed theoretically and in qualitative research, there is no methodology that would allow for mapping of this area of the link and allow further research in the context of related social-psychological factors.

The methodology was developed based on reviewed literature. It consisted of 38 items (statements), which were adopted or derived from conducted research and amended with own items logically completing the examined context. This methodology has been subjected to the principal axis factoring analysis, which has been performed three times. The Aspects of Presenting Alcohol Related Posts on Facebook methodology has been created based on this principal axis factoring analysis, which consists of 6 items or statements that represent 2 factors: (1) the attractiveness of the alcohol related post (motivation to consume alcohol after seeing the alcohol related Facebook post) and (2) the incidence of alcohol related Facebook posts of friends. The respondents use the five-point Likert scale to express the extent to which they agree or disagree with given statement (1 - strongly disagree; 5 – strongly agree). This developed methodology needs to be repeatedly verified (on a similar and a different research sample) and further examine, whether the given construct is sufficiently captured. If the methodology will be proven valid, it will be used to explore said context in relation to other social-psychological factors.

In the context of comparing the developed methodology to existing research in said area, we would like to point out several relations. The first identified factor, named the attractiveness of the alcohol related post, corresponds to the findings of other authors. Alhabash et al. (2015) examined the intention to consume alcohol in connection to presenting alcohol related posts, which is fully reflected in our factor. This first factor also represents one of the behavioral patterns discovered by Barnes et al. (2016) in their focus groups. It was behavior where individuals are online and start to consume alcohol while being online. It is this first factor that describes the motivation in this regard. If the individual sees an alcohol related post, he or she has stronger appetite for alcohol or desire to go drinking. It is therefore the engaging or planning to consume alcohol that these authors have mentioned. Additionally, their research included different positive assessments of alcohol related posts that can be found also in our first factor, where alcohol sounds more appealing after viewing an alcohol related post. On the other hand, it must be noted that Alhabash et al. (2015) nor Barnes et al. (2016) did not address the topic in their research, which is contained in our second factor.

The second factor, named the incidence of alcohol related Facebook posts of friends, corresponds to the findings of several authors. Huang et al. (2014) mapped out whether Facebook friends post alcohol related posts and whether they discuss this online. This factor corresponds to the findings of Westgate et al. (2014), who examined how often Facebook friends post alcohol related posts. However, the developed methodology is missing the area, which would examine how often the individual posts these posts by themselves. Perhaps this reflects the fact that fact that the influence of others, especially friends (descriptive standards) is great. The second factor partially corresponds to the results of the qualitative analysis, conducted by Hutton et al., (2016), which reflects the topic discovered by them, where people use the alcohol related Facebook posts and pictures to brag. It is this second factor that describes

the fact that Facebook friends inform in advance about their plans to consume alcohol and that posting posts from events with alcohol is their popular activity. The developed methodology lost items with negative assessment of alcohol related Facebook posts that these authors discovered in focus groups. It is as if these posts would be assessed only positively. The need for further exploration is even more evident because positive perception supports the development of risky behavior.

In this section it is necessary to also mention the research limits which include the cross-sectional design of data collection, as well as the occasional sample selection; which was limited also by the willingness of the teachers to participate in data collection and allowed access only to selected students. The prevailing number of women in the research sample also represents a limitation. Our recommendation is to re-verify the developed methodology using a different sample of college students which would be gender-balanced. We also recommend further research and testing of the validity of the developed methodology. It could be interesting to test the methodology in other age groups, since alcohol consumption also occurs at a much younger age, and individuals as young as 14 can become Facebook users. This period may be even more influenced by what is presented by friends (descriptive standards) and this presentation of alcohol on Facebook may have a more radical impact on individuals.

In conclusion we can say that developing this methodology to examine the construct that is linked to our current time is undoubtedly the great contribution of this paper. It offers an area for further examination which can be beneficial in explaining the complex impact on the individual and perhaps even in contemplating how to eliminate, or at least reduce, the negative impact on the individual.

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Philomena de Lima. *International Migration – The Wellbeing of Migrants*. Edinburgh, London: Dundin Academic Press, 2017, 110 pp. ISBN 9781780460499

Migration has been widely discussed over the years; with public discourse responding to the information offered by both scientific researchers and the media. Increased numbers of incoming migrants prompts the need for changes in policy, practise in health and social care. Diversity within a migrant community also poses challenges for public and social policies. Such trends influence and have implications for accessing health or social care services. Recent migration waves into Europe have happened on an unprecedented scale and the related political agenda has changed accordingly. Policies on migration are influenced by demographic trends, changing geo-politics and globalization pressures. There is a clash between public concerns and humanitarian impulses regarding the perceived welfare burden that migration imposes on host societies.

The author of this book offers a present-day description and understanding of the topic of migration, with afocus on migrants' access to services and their well-being. She discusses their entitlement to public services and changes in policies across the European Union and beyond. The book focuses on people crossing national/international borders, temporarily or permanently residing in a destination country. The focus is particularly drawn to migration from the "South" (lower income countries) to the "North" (higher income countries), and to the European Union, above all. In the EU this is considered Third Country National (TCN) migration, which is migration from outside the EU. Intra-European Union migration is discussed as well, with reference to the United Kingdom and Scotland.

The book is divided into 6 chapters: Chapter 1. Introduction: The changing dynamics of international migration; Chapter 2. We are all migrants: Definitions and immigration policies; Chapter 3. Trends in International Migration; Chapter 4. Making Sense of Migrants Trajectories; Chapter 5. Migrant Well-being and Health; Chapter 6. Conclusion: Navigating the international migration maze. At the end of the book, the reader can find a very useful list of references containing more current literature on the migration topic.

In the introductory chapter the author describes the choice of using the general term "migrant"; most often not to convey homogeneity. However, in the context of the book it works as a convenient label. Specific groups such as refugees, undocumented people, asylum seekers are referred to when necessary. Essential definitions and a review of events needed for the context are presented as well (for example: migration, the current situation in the EU, the concept of well-being, and complexities of international migration). The second chapter is divided into one part about basic definitions and another part about immigration policies. The author provides an insight into different definitions of the term migrant in contrasting contexts, and reviews the most commonly used categories. Then she presents an overview of immigration policies and government mechanisms at international, EU and UK levels.

The third chapter overviews international migration trends at three levels – global, European and

in the UK and Scotland. It emphasizes the importance of working with reliable data on migration trends, since the collection of some data runs at a national level despite the transnational quality. This chapter also highlights the fact that diversity in migrant routes and categories presents new challenges for states' border control and how the receiving/sending countries are becoming less clear.

The fourth chapter draws attention to a critical overview of terms or concepts used when describing migrants' experiences in the country of arrival (destination) and the concept of well-being. Previous chapters help the reader understand the consequences of how facilitation to living a fulfilling life works and how to facilitate the adaptation. Within this context, the fourth chapter describes integration, assimilation, citizenship, inclusion and transnationalism. In connection to policy-making, it is necessary to view migrants as people with aspirations and with a focus on well-being in order to tailor new policies for them, not just to view them as the "objects of policymaking".

The fifth chapter again uses the knowledge of well-being from the previous chapter and describes the relationship between migrants' well-being and health. It discusses the impact of the journey, the critical importance of health, how health can shape the migrant's well-being and potential risk factors.

The last chapter sums up and connects the main topics from each chapter while emphasizing the crucial role of putting migrant well-being at the centre of discussion about international migration. The author expresses the importance of understanding the well-being as a relational process created and recreated throughout the whole journey, with its economic, political and cultural processes.

Philomena de Lima's book can inform and educate social scientists, policy-makers and those interested in the practical implications of migration. This publication offers valuable insights and practical as well as theoretical knowledge on the topic of international migration.

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Conference report "4th International ESS Conference", Mannheim, Germany, 15th – 17th April, 2019

The conference "*Turbulent times in Europe: instability, insecurity and inequality"* was held this year in Mannheim, Germany. The conference organizing committee was led by GESIS-Leibniz Institute for Social Sciences and hosted by the University of Mannheim. The main aim of the conference was to present papers on a wide range of subjects, based on the European Social Survey (ESS) data. Over 150 academic papers presented in over 30 sessions shone a light on key social issues and informed how policy could be implemented to lead to a better future for Europe.

The conference schedule was divided into 29 parallel sessions, 3 plenary sessions and a poster session covering a diverse range of ESS topics. After each presentation, a discussion was chaired by an invited expert in the field. Organizers of the conference also prepared a smartphone application that included all the relevant information about the conference. This helped all attenders to prepare for the conference so they could set their own agenda and not miss any presentations they were interested in.

The conference was opened on Monday 15th April, with a plenary session where a keynote speaker – professor emeritus Stockholm University, Lars Lyber, PhD., presented the problems and challenges of 3MC Surveys as European Social Survey (ESS), World Value Survey (WVS) and the Survey of Health, Ageing and Retirement in Europe (SHARE). On the first conference day, nine parallel sessions covered topics such as: Re-examining political efficacy using the ESS (André Pirralha & Sarah Butt), Electoral participation in a turbulent era (Andrés Santana), Public attitudes towards climate change (Christina Eder & Keith Smith), and The refugee crisis in Europe (Steele & Breznau). A poster session included 10 posters from PhD students or young researchers from the Slovak Academy of Sciences (Pastrnáková & Bozogáňová), University of Tasmania (Chui) and the Lithuanian Social Research Centre (Vyšniauskiené). The day ended with a welcome reception that was held in Mannheim Baroque Palace which offered more opportunity for acquaintance and discussing possible cooperation and sharing problems associated with the work of researchers.

Tuesday, 16th April, started with parallel sessions on topics like Ethnic and cultural diversity and integration (Heath & Schneider), Democratic values in a comparative context (Marquart-Pyatt & Ponce) or Welfare solidarity during turbulent times: Eastern vs. Western Europe (Gugushvili). Plenary sessions were dedicated to keynote speakers - Francesca Borgonovi, senior Policy Analyst at the OECD, and to the winner of Jowell-Kaase Early Career Researcher Prize 2019 - Mark Visser, an assistant professor in the Department of Sociology at Radboud University, Nijmegen (the Netherlands). The second conference day ended with a conference dinner hosted by Eichbaum Brauhaus, where attenders could enjoy the German cuisine.

The final day on 17th April covered other spheres of topics; for example Gender norms and cultural factors in the division of labour among couples and work-life conflict (Szalma & Ochsner), Immigrants in European societies (Gorodzeisky & Semyonov) and Generating new insights from the ESS probability based on-line web panel (Fitzgerald & Bottoni). After all the presentations, the feedback and suggestions of colleagues led to inspiring discussions and possible future cooperation.

To conclude, the conference brought together researchers from different fields of science, from divergent countries around the world (US, Europe, Asia), but all of them had at least one thing in common; their interest and work with the European Social Survey data. For more information about the European Social Survey (rounds, data, conferences etc.), please, go to the website: http://www.europeansocialsurvey.org/.

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Conference Report „Czech, Slovak and Czechoslovak 20th Century History XIV“, Hradec Králové, Czech Republic, April 2 – 4, 2019

During April 2-4, 2019, the Faculty of Arts of the University of Hradec Králové hosted the 14th annual international scientific conference of the younger generation of historians entitled *“Czech, Slovak and Czechoslovak History of the 20th Century XIV”*. This conference has already become an important event that reflects the current state of historical research and also contributes too many expert discussions on the complex issue of Czechoslovak history. Every year the conference creates a space for the younger and. middle generation of Czech and Slovak historians to present their research activities.

On April 2, the conference was opened by Prof. PhDr. Dana Musilová, CSc. from the Historical Institute of the Faculty of Arts of the University of Hradec Králové; PhDr. Peter Weiss, CSc., Ambassador of the Slovak Republic to the Czech Republic and PhDr. Vojtech Čelko from the Czech-Slovak Commission of Historians. The program of the three-day conference was divided into 7 conference blocks. Within them, 9 sections were thematically created. During the first day, conference papers were presented in two sections: The Specifications of the Third Republic; and the 1960s and 1970s. On the second day, papers were presented in five sections: The Interwar Period; Communism – Ideology, System Operation, Emigration; Gender; World War II and the Region as a Centre of Action. During the last day, the speakers presented their topics in two sections: Press, Media and Reflection of Time; and the Economy.

A total of 35 conference papers were presented at the conference by Ph.D. students and young historians from the Czech Republic, Slovakia and Poland. The presented papers covered a wide range of interesting topics. Michaela Smidová from the Charles University presented *“Construction of gender in the Slovak interwar women's movement”*. Another interesting topic was *“Nobility between two totalities: The House of Kinsky at the time of the so-called Third Republic”* by Lenka Hrdinová from the Charles University. Representing the Institute of Social Sciences of the Centre of Social and Psychological Sciences of the Slovak Academy of Sciences, Ph.D. student, Miroslava Gallová, delivered a paper on *“Female philanthropic activities in Košice during the first Czechoslovak Republic”*.

Each conference section was followed by a critical evaluation of the papers. The comments of the scientists/historians drew out some valuable suggestions from the presented papers.

The conference was attended by 9 commentators from several Czech and Slovak universities and other scientific institutions: doc. PhDr. Stanislav Holubec, Ph.D. et Ph.D., PhDr. Jan Mervart, Ph.D., Mgr. Karol Hollý, PhD., Mgr. Adam Hudek, PhD., Mgr. Denisa Nečasová, Ph.D., plk. Mgr. Miloslav Čaplovič, PhD., PhDr. Richard Pavlovič, PhD., Mgr. Kateřina Portmann, PhD. a Mgr. Jiří Janáč, Ph.D.

Apart from the discussions that followed each conference section, the organizers also prepared an interesting round table discussion for the conference participants, held at the end of the second day of the conference. The main topic was doctoral study in the Czech Republic and Slovakia – the current status, possibilities and perspectives. The discussion was

moderated by Mgr. Milan Sovilj, Ph.D. from the Historical Institute of the Faculty of Arts of the University of Hradec Králové. The discussion was attended by doc. Mgr. Veronika Středová, Pd.D. from the Historical Institute of the Faculty of Arts of the University of Hradec Králové, Mgr. Denisa Nečasová, Ph.D. from the Historical Institute of the Faculty of Arts of the Masaryk University, Mgr. Ladislav Voros, PhD. from the Historical Institute of the Slovak Academy of Sciences and PhDr. Jan Randak Ph.D. from the Institute of Czech History of the Faculty of Arts of the Charles University.

The whole conference was conducted in a friendly spirit and at a high level. Most of the presentations had positive feedback. During the discussions, valuable dialogues developed between doctoral students, commentators and moderators of the individual blocks. They resulted in a number of observations and recommendations that can help to refine the dissertations. On the organizational side, the conference met the standard criteria. The chosen conference papers will be published in the almanac after the review process.

More information about the conference can be found at:
https://portal.ff.uhk.cz/historie/ceske-slovenske-a-ceskoslovenske-dejiny-dvacateho-stoleti-94.html

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Conference Report – "Work and Organizational Psychology 2019", Brno, Czech Republic, 22nd – 23rd May 2019

This year's 18th international "Work and Organizational Psychology Conference" took place on 22nd and 23rd of May 2019 at Masaryk's University in Brno, Czech Republic. The conference has been held annually since 2004, in Slovakia and the Czech Republic, but the conference itself dates back to 1999, and therefore this year marks its 20th anniversary. Each year contributions from research, education and practise are welcomed. The main areas of focus were topics such as: work in the context of everyday life, personnel psychology, psychology of management, organizational psychology, psychodiagnostics in work psychology, traffic psychology and forensic and penitentiary psychology. The conference programme was divided into 10 parallel sections which were thematically arranged, each ending with a discussion and grouped by Czech/Slovak and English languages. This international conference hosted speakers and participants not only from the Czech Republic and Slovakia, but also from Poland, Sweden, Thailand and the USA. On Wednesday 22nd of May, the main programme was followed by a poster section and a social evening gathering, where participants were able to exchange valuable knowledge and network in an informal atmosphere. The main sections of the day were: Organizational Psychology, Modern trends in work psychology, Keynote speakers' section, Work in the Context of Everyday Life, Attitudes and Well-being, Work Psychology in Education and Psychology in Business.

On Thursday 23rd of May, participants attended sections named Psycho-diagnostics in Work Psychology, Penitentiary psychology and psychology in the armed security forces and integrated rescue systems, Organizational Psychology, Traffic Psychology and had an opportunity to hear more keynote speakers.

The first day began with the opening ceremony and shortly afterwards the programme started with M. Bozogáňová and T. Lorincová with their presentation about "Attitudes towards migrants in the Slovak population based on the Eurobarometer". In the parallel section A. Šťastný opened with "Virtual reality as a tool for competencies measurement". After a lunch break, keynote speakers for this day prepared interesting presentations. Prof. T. Scheel talked about humor in "Humor is always at work: State of the art and future prospects of the functions of humor in a work context", T. Lorenz about "Positive psychology across borders - pitfalls and remedies", Š. Bahník discussed "Does social psychology have to disguise itself as behavioral economics to have an impact? A case of dishonesty research". After a coffee break, T. Sollár spoke about "Personality characteristics and its place in the psychology of work". The next section continued with M. Kentoš who presented "The causes and context of job insecurity in Slovakia" and Prof. J. Výrost (who also chaired section about Work Psychology in Education) provided insights into "Is a digi tsunami approaching? Psychological associations of digital transformation of society in personal and work life of Europeans". The Attitudes and wellbeing section continued with a presentation about intervention techniques in "Interventions to decrease stress and increase wellbeing" by P. Eisele. Another contribution from outside Slovakia was about spirituality in Thailand, discussed by N. Tapachai and S. Chomngam in "Spirituality in the workplace, job satisfaction and work engagement of state enterprise employees in Thailand".

The conference then offered a selection of poster section where A. Loziak presented "Effectiveness of mindfulness training programs in improving work stress management in teachers", V. Pastrnáková presented a poster about "Attitudes towards migration" in the context of the labour market, M. Frankovský and M. Birknerová offered "Evaluation of bossing behavior in the context of employee characteristics". Other posters were also presented, while conference participants could vote for the best poster. The other 2 sections were held in parallel and offered presentations such as "Meaningfulness of work and satisfaction of a grammar school teacher" by Prof. K. Paulík or "Effect of entrepreneurial education on opportunity evaluation" (A. Zelienková, Z. Kožárová). Psychology in the Business sector contained, among others, a practical analysis by D. Fedáková and Z. Kožárová, called "Profiles of young entrepreneurs". After a day containing a lot of valuable research and data, participants could discuss their opinions and exchange contacts through a social gathering held on the University's premises.

The second day continued with another 5 blocks and parallel sessions. During the psycho-diagnostic block, J. Bavoľár presented "Intolerance of uncertainty - psychometric characteristics of the Slovak version, relationships with similar constructs and application possibilities in work psychology" and F. Bělohlávek "Criterial validity of assessment centres for line managers in the automotive industry". The Penitentiary section offered contributions from the armed security forces, S. Haluzová described the suicidal behaviour of prisoners, while M. Kaštánková spoke about military families' care in case of emergency. After a short coffee break keynote speakers H. Peřina and Z. Primusová discussed employee engagement and employee management. Two last sections about organisational and traffic psychology ended the conference with presentations about "The social skills for nurses who work in specialized departments" (J. Woleská, I. Gillernová) and "Personal profile of a risk-taking driver in road traffic" (J. Šebová Šafaříková).

At the end of the Conference, both organisational team and participants expressed gratitude and discussed upcoming events.

The conference proceedings and more information can be found at https://ppao.upol.cz.

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