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Does Work Mean Something Different to Men and Women? An Empirical Examination of the Psychological Contract in the Workplace across Two Countries

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ABSTRACT

A substantial literature has emerged in recent years advocating the view that women and men have different definitions, approaches and emanating perspectives of work. However, many of these assumptions regarding gender differences in construal of work are not empirically supported. Within the framework of the psychological contract, this study contributes to the literature by analysing the constructs of work obtained from both sexes, proportionately distributed across comparable cohorts of workers in the Czech Republic and the UK. The findings show a high degree of congruence in the construct distributions for both sexes, supporting the argument that gender inequality is socio-cultural in origin and not a product of gender-based differences in the construal processes. Suggestions are made concerning implications for practice.

Keywords: Gender equality; Work; Psychological contract; Leadership development

1. Introduction

Much of the recent literature assumes that women and men hold different conceptions of work and

that this may require fixing for women's effective inclusion in the workforce. One of the most remarkable popular texts has been Sheryl Sandberg's 'Lean In', which encourages women to join in workplace

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decisions, discussions and processes. The fundamental assumption is that women and men have different constructs of work and corresponding working styles and behaviours. This and other postfeminist pieces are criticized for failing to recognize the gendered treatment of women and men that condition their behavioural responses. However, in this paper, we question the assumption of fundamental gender differences in how women and men define and frame work.

Recent studies, grounded epistemologically in constructivism and social constructionism, respectively posit that work predispositions can emerge from personal experience and social interaction before individuals enter the workplace ^[1,2]. In particular, cultural influences appear to materially influence individuals' pre/dispositions to work, manifest in their psychological contracts with their employers ^[3,4]. This study focused on differences in the construal of work between age-defined cohorts of differing nationalities; we offer an analysis that examines sex differences in the construal of work among this cohort in two different national settings.

Grounded in the phenomenology of Hegel ^[5] and Husserl ^[6], constructivism posits that people develop their interpretations of a shared reality from the flow of lived experience. Kelly introduced constructivist thinking into the domain of psychology with his theory of personal constructs ^[7,8], recognising that the range of available interpretations of phenomena, and thereby the range of individuality, is infinite (constructive alternativism). Kelly proposes that each person develops a hierarchical mental structure that is experientially derived, unique and effective to the degree it can anticipate future events. Central to this perspective is the concept of a bipolar 'construct'; as an expression of one thing as similar to something else (emergent pole) but unlike another (implicit pole), the construct is the basic unit of meaning within personal construct psychology, whilst the idea of interrelated constructs contributes to its explanation of cognition and rational thought. Kelly provides 11 corollaries that explain the organisation and functioning of the construct system, presenting it as a flexible and adaptive mental structure that is constantly under revision as new

phenomena are encountered. Personal construct theory is distinguished from other psychologies by its epistemological completeness. This work follows Kellian principles to examine sex-based differences in the construal of work.

Whilst the subject of gender inequality has increasingly permeated the Western popular and academic narratives in recent years, the definition of the term 'gender' has itself been subject to revision in the light of recent socio-cultural changes in self-definition and its associated lexicon. On one hand, it is increasingly rare to encounter academic accounts that view 'gender' as synonymous with 'sex' as a simple biological demarcation between male and female, which is often referred to as the 'gender binary' ^[9]. Indeed, the term 'gender' can encapsulate a wider raft of preferred designations such as nonbinary and transgender identities ^[10]. Moreover, the latter suggests that a clear binary distinction expressed in terms of differences assumed to be profoundly biological (those expressed in neurological and neuro-hormonal terms) is unhelpful. Hare-Mustin and Maracek ^[11] suggest that "... from a constructivist standpoint, the 'real' nature of male and female cannot be determined. Constructivism focuses our attention on representations of gender, rather than on gender itself". Kinsella ^[12] suggests that "... the determination of sex is a process of construction within a social reality that is already gendered", supporting the view that it "...is something that one practices (in nearly every sense of the word), rather than only what one inflexibly is" ^[13].

It is clear that the binary distinction, expressed in relatively unobvious terms based on biological sex difference, is profoundly important in the way in which work is organised, structured and rewarded ^[14-16]. Here, perceptions matter, and three bodies of research can provide insight into how this impacts behavior in organizations. Psychological Essentialism and Entity Theory provide insight to help understand the popular beliefs that personal attributes are largely biological, unchanging and immutable ^[17], Social Role Theory focuses on the ways in which gender roles are culturally determined and socially created ^[18], and, system Justification Theory proposes that

people are influenced by a fundamental motive to see the current system—that is, laws, social structures, and societal norms—as good, fair, and right^[19], indicating the normative power of such perceptions.

1.1 Some contemporary explanations of workplace sex bias

The female leadership talent pool is both socially and commercially attractive, perhaps even more so than its male counterpart^[20]. Nevertheless, the gender disparity in leadership representation, which inversely correlates with seniority^[21], and pay^[22,23] are both clearly evident in the literature and beyond. Consequently, it is imperative to explore additional factors that may serve as plausible explanations for this imbalance.

The themes below touch upon some contemporary considerations, although the literature is vast, complex and evolving. These themes do not purport in any way to represent a robust taxonomy of current thinking; rather, they are presented collectively as a broad contextual framework that is used later in the paper to aid the interpretation of the results from this study.

Systemic workplace bias

Some commentators have observed that systemic cultural bias percolates organizations^[24], whose leadership stereotypes tend to be masculine^[25], and that women can be subject to prejudicial performance evaluation^[26] where companies fail to provide them with legitimate credibility^[27]. If leader-subordinate relationships within a masculine environment are both (masculine) social and (masculine) values-laden, it would be unsurprising to see leaders favour and promote (male) subordinates who share their own (masculine) values, such that the (masculine) culture will persist in the absence of any pressure for change. As Foucault^[28] argues, those who control the power also control the knowledge (or received wisdom) and thereby the cultural narrative.

Aspiring female leaders must navigate these masculine norms to break the ‘glass ceiling’. Trompenaars^[29] suggests that “...the way to the top in any organization is to adopt its most salient

values and eschew its least salient”, arguing that, for women, this means adapting to the dominant (masculine) culture and measuring their success according to its yardsticks, perhaps compromising their identities in the process^[30]. The challenge for women leaders, who are stereotypically expected to be communal but as leaders are expected to be agentic, is a ‘double bind’, where too much agency can result in dislike and too much communion can create the perception of ineffectiveness. Thus, “successful female leaders often engender hostility, are not liked, and are personally derogated for violating gender stereotypic expectations”^[31]. In some cases, they may even shun junior female colleagues^[32]. Where women leaders simply adopt and perpetuate the masculine cultural paradigm, the potential for desirable gender influence is neutralised, somewhat ironically (and almost certainly unconsciously) fuelling the inequity.

Cultural pressures

Hofstede^[33] argues that groups are winning over individuals in the ‘battle’ for cultural replication, posits that the “...wish to be a good, upstanding member of the community is ubiquitous, and human emotions associated with that tendency such as pride, awe, shame and guilt can be violent. These emotions cause people to devote their lives to their group...”. The pressure for women to conform to the cultural gender stereotype is prevalent, suggesting that any change will need widespread social acceptance to be effective. Such change can happen slowly and, in less liberal cultures, may be fiercely opposed.

Personal dispositions

Some commentators have drawn attention to psychological considerations that may contribute to gender imbalance within the workplace. Two are of specific relevance to this study:

The first relates to the process by which women come to take up the mantle and define themselves as leaders. The process of integrating the leader identity within the ‘core self’ is argued to be easier for men because “people see men as a better fit for leadership roles partly because the paths to such roles were

designed with men in mind; the belief that men are a better fit propels more men into leadership roles, which in turn reinforces the perception that men are a better fit”^[34]. The fact that men and women respectively associate status and relationship quality with success at work^[35,36] reinforces the argument concerning “fit”; if men occupy the majority (if not all) of the senior roles in largely masculine cultures, then masculinity can effectively become synonymous with seniority and, de facto, a leadership prerequisite to those (men) who make promotion decisions. Indeed, and for the same reasons, those women who do achieve seniority may encounter difficulties in legitimising their roles^[37].

McKenzie^[38] posits a progressive journey for women would-be leaders that involves four discrete phases: (1) views of leadership as external to the self, (2) positional leaders, (3) incorporation of self-as-leader, whether in a position or not, and (4) leading for social change. Ibarra, Ely and Kolb^[39] describe this transition as a fragile process that is often compromised by the more subtle institutional discriminations that characterise ‘second generation’ gender bias^[40] and argue for specific strategies to help women navigate the self-identification challenge.

The second consideration concerns women’s apparent willingness to accept lower levels of remuneration than men. Whilst the gap is narrowing, particularly among younger age groups^[41], an imbalance may persist because many older women are prepared to compromise in response to normative pressures originating from the received wisdom, moderating their expectations accordingly. Auspurg, Hinz and Sauer^[42] suggest that, instead of benchmarking against male holders of the same role, women tend to compare themselves to other underpaid women when considering equity in remuneration. Once again, the norms of the culture, along with its embedded stereotypes, appear to be resisting the impetus for change.

1.2 Constructivism, gender, sex and work

Piaget’s^[43] seminal model of child development is a keystone of constructivist thought. Some limited

constructivist literature that demarcates sex types in human development augments this thinking. Adams-Webber and Neff^[44] show how children increasingly differentiate themselves from their parents and their parents from each other, noting that girls distinguish themselves from their fathers far more than boys do. Research among children^[45] shows that females tend:

“...to produce longer self-characterizations that are more detailed, more coherent, and more focused on the self...they made more frequent mention of friends and were generally more inclined to refer to others in positive terms... find it easier to focus on their own emotions and those of others, particularly on positive emotions such as joy... perceiving themselves as competent in managing and controlling events”.

The notion of innate sex-based differences in self-confidence sometimes surfaces in the gender-related narrative and beyond. Rucker and Gendrin’s^[46] investigation of self-construal (among Westerners) found no difference in self-esteem ratings derived from direct feedback but did observe a tendency for females to derive greater satisfaction than males from indirect social endorsement. Liben et al.^[47] draw on several constructivist theories that pertain to gender during development, defining children as agentic, actively assimilating experiences to develop sex-role values and gender cognitions (schemata). To varying degrees, these theories speak to the influence of socialised culture alongside personal experience in the development of gender dispositions. Significantly, their findings demonstrate that both males and females strongly demarcate activities and occupations by sex but are less discriminating in defining personal traits as either masculine or feminine, suggesting a possible softening in Western social attitudes that contribute to individual construction of the latter.

The notion that, with ongoing socialisation, females exhibit a significantly higher degree of cognitive complexity than males in the construal of role relationships was established over half a century ago^[48]. More recent research^[49] substantially demonstrates how women differ from men in several cognitive functions including verbal ability, reading comprehension, writing, fine-motor coordination and

perceptual speed. Drawing on Kelly's explanation of sociality as a psychological process requiring one party to understand the construing process of another in order to enter into a social relationship, Adams-Webber^[50] highlights the possibility of communication problems between genders. Having established higher levels of complexity (as identified by differentiation scores) in females than in their male partners, he notes that while a more cognitively complex partner can encourage the development of complexity in a less cognitively complex partner, he also suggests (as a possibility for further study) that differences in cognitive complexity between partners may lead them to experience 'considerable difficulty in establishing and maintaining a mutually satisfactory level of sociality'. This seems consistent with other findings^[51] that women define themselves as higher in relational interdependence than men, and men define themselves as higher in independence/agency than women. The implication is that women consider themselves in terms of a social role more than men do, while men define themselves in terms of independence/agency.

Some contributors^[52] draw directly on personal construct theory to show how gendered processes influence career choice, leading to different outcomes for males and females. They propose three types of intervention to help individuals reconstrue their dispositions and, in doing so, extend the range of choices available to them.

Despite prior research showing differences by sex in perceptions of supervisor-subordinate relationships, satisfaction with communication and decision-making processes^[53], along with significant differences in the descriptions of a disliked co-worker given by women and men^[54], more recent research found little sex-based differences in the construction of expected co-worker behavior when measured against the culture of the organization. In summary, "...women and men in the organization may be using the same 'shoulds' and 'ought tos' as bases for evaluating, for example, their supervisors. However, their perceptions of the degree to which their supervisors 'measure up' are quite different"^[55].

Some research^[56] has used the grounded constructivist technique to ascertain that women resort to the enactment of their femininity, adopt male characteristics, seek mentorship and draw on intrinsic motivational factors in response to organisational practices that uphold gender discrimination and bias.

Following the constructivist paradigm, this paper re-examines data from an earlier study on the construal of work^[3], this time from the perspective of sex. Research design and methodology are summarised in the forthcoming sub-sections, full details of which are provided in the associated research^[4].

2. Materials and methods

The research objective is to identify differences between sexes in the construal of work, with the following specific research question in mind:

"How does the construal of work differ between males and females of two different nationalities working for the same financial services organisation, with particular reference to a) the relative importance placed on interpersonal relationships at work, b) the influence of male/female stereotyping in its construal, and the importance of c) ethics and d) remuneration to each sex?"

2.1 Empirical work

The research drew on the principles outlined in Kelly's personal construct theory^[7,8] to explore the work dispositions of two nationalities, respectively with and without experience of working within a command economy, under the theme of the psychological contract^[57].

The psychological contract is recognised in the literature as an individual mental construction that (a) spans all of the beliefs of an employee^[58-60], (b) concerning the obligations of both worker and employer^[61,62], (c) held consciously and otherwise^[63-65] that is (d) continually reshaped by experience^[66] to provide (e) a representation of those beliefs at a particular point in time^[67-69].

The psychological contract differs from a legal contract in two key respects because it is largely

tacit, residing in the mind of the individual employee, and continually revised in the flow of experience. In this sense, it has all the qualities of a Kellian construction. Furthermore, it is not an agreement. Because its 'terms' are held solely and tacitly by the employee in the form of an expectation of reciprocity without those terms necessarily being expressed by the employer, there can be no agreement with the employer in the accepted legal sense. In this respect, the term 'contract' can be considered a misnomer.

2.2 Research design

Because much of the personal meaning involved in a psychological contract tends to involve unspoken elements^[70], the repertory grid was chosen as a technique well-suited for surfacing the various meanings involved^[71] during the initial data collection phase. Given that the psychological contract is shaped by and reflects personal values that are already established when individuals enter the workplace^[72-74], data on the participants' personal values were collected in a second round, using laddering technique.

Constructs were obtained through standard triadic elicitation. Here, respondents are asked to identify which two of three elements (or examples of the topic under examination) share a similarity, the third being contrasted; the reason underlying the contrast is used to specify the construct^[75]. Once elicited, the constructs present in the whole research sample of respondents were aggregated through content analysis to identify the kinds of constructs and values that characterize the male and female cohorts within the sample.

2.3 Participants

Four separate groups comprising staff working within the Czech and UK operations of the financial services case organization at the time of the research were selected for the study on a purposive sampling basis. The sample comprised equal cohorts with and without command economy experience (for the Czech component only, the comparable UK

group featured staff of similar age). All had work experience with the case organization and at least one other company. Details of the sample can be seen in **Table 1**.

2.4 Procedure

During enlistment, participants were given an overview of the psychological contract concept and a short, written description of the research objectives. Each committed to two separate 1-hour interviews aimed at "*To identify situations in your working life where you felt you had a good or poor psychological contract*". The first interview aimed to elicit the constructs relating to significant psychological contracts in the interviewee's working life by inviting a comparison between three of the elements shown in **Table 2** and asking how two were similar yet different from the third. The constructs identified in the first interview were then explored further in the second and "laddered"^[76] to arrive at individual personal values. **Table 2** shows the supplied elements the interviewees were asked to think about when remembering their own particular past and current experience of contracts.

2.5 Analysis

411 constructs were elicited from all 40 interviewees. They were pooled into one dataset and categorized according to meaning, to provide information about the different meanings present in the sample as a whole. The categories were derived from the data, following the 'bootstrapping' procedure described in Jankowicz^[77]. To ensure reliability, the same categorization process was undertaken independently by a qualified post-doctoral collaborator and the two outcomes were compared and negotiated to achieve an acceptable level of congruence (93% agreement, Cohen's Kappa 0.92, Perrault-Leigh Index 0.96).

A content analysis of the constructs offered by a group of participants does not capture the data present in the rating of elements on their constructs, but it is possible to draw on the information

Table 1. Sample composition.

Business unit	Subsidiary		UK head office	
Location	Czech Republic		England	
Qualification	English-speaking Czech nationals working in departments outside of the author’s direct control in the Prague Head Office		US or UK nationals working in the London Regional Head Office	
Selection process	Selective identification according to given criteria from company staff register		Selective identification according to given criteria from staff registers for departments deemed accessible for the research by HO	
Groups	Group 1	Group 2	Group 3	Group 4
Selection	10 staff with command economy work experience	10 staff without command economy work experience	10 staff of similar age to staff from Group 1	10 staff of similar age to staff from Group 2
Gender (M,F)	5,5	5,5	7,3	3,7
Age				
Minimum	50	30	51	27
Maximum	61	46	67	44
Average	55	36	55	35
Years Working				
Minimum	27	5	23	6
Maximum	42	23	47	23
Average	33	14	35	14
Years With Case Org.				
Minimum	2	2	2	2
Maximum	25	20	28	15
Average	13	7	10	7
No. of Employers				
Minimum	2.0	2.0	3.0	2.0
Maximum	9.0	5.0	8.0	7.0
Average	4.3	3.1	4.6	3.8
No. of Departments Spanned	5	6	5	7

Table 2. Supplied repertory grid elements.

Element	Elicit constructs concerning...
The contract I imagined before starting work	Cultural influences
My first contract	Work socialization
My best contract	Individual perception
My most typical contract	Perpetuation through reciprocity
My worst contract	Sensitivity to breach
The contract immediately before I last changed employer	Sensitivity to breach
My current contract	Work engagement
My ideal contract	Work as identity and meaning

present in each individual respondent’s ratings to establish the personal salience of their constructs, thereby preserving individual meanings within a

group as a whole. This was done by *supplying* a construct, “Good psychological contract—poor psychological contract” to each respondent’s grid.

This involved computing a similarity score for each interviewee by comparing their ratings on the elicited constructs to the ratings they provided for the supplied construct^[78]. This involved computing a similarity score for each interviewee by comparing their ratings on the elicited constructs to the ratings they provided for the supplied construct, with those coded “High” signifying particular salience to the individual’s construing of the psychological contract. Distinguishing between ‘All’ and ‘High Salience’ constructs elicited during the research in this way provides insight into the intensity of meaning manifest within each of the construct categories identified during the research.

During the laddering procedure mentioned above, a total of 284 values were elicited from the same 40 participants. These values were also subjected to the same ‘bootstrapping’ exercise to arrive at a robust categorisation, with the same tests showing reliability within acceptable tolerances (92% agreement, Cohen’s Kappa 0.90, Perrault-Leigh Index 0.95).

3. Results

3.1 Constructs

The constructs elicited during the first wave of research interviews are summarised in **Table 3**, and distributed according to the sex of the respondent. Separate distributions are included for ‘All’ and ‘High Salience’ constructs.

The total number of constructs (216) elicited from females within the sample is somewhat higher than the male total (195). Despite this difference, the heuristic in this respect is that both sexes in the sample find a broadly equal degree of meaning in work.

Interpersonal relationships

The importance of the social qualities of work to both sexes is clear from the rankings of ‘Organizational Culture’ and ‘Team Dynamics’; these categories rank 1 or 2 at the ‘All’ and ‘High Salience’ levels, with broadly similar concentrations for each sex. Above all else, **work meaning seems to reside most deeply in**

its social qualities for both males and females.

Male/female stereotyping

There is relatively little in the findings that speaks to or supports any assertion that women and men construe work in materially different ways. Given the extensive literature surrounding (the lack of) workplace equality, the distributions show a perhaps surprising degree of construal similarity. Both male and female cohorts share the same top five construct categories, which respectively account for 111 (57%, M) and 121 (56%, F) of ‘All’ constructs, and 59 (68%, M) and 52 (59%, F) of ‘High Salience’ constructs. Echoing and developing the previous point, this shows that, at a high level of construing, both sexes find not only the same degree of meaning in work but also that they find it in relation to the same qualities. **There is a high degree of congruence in the way males and females within the sample construe work—appreciably more than sets them apart.**

The single exception here, which may indicate a sex-based difference, is only observed at the ‘High Salience’ level, where Autonomy (3rd for both males and 5th for females in the ‘all’ distribution), falls out of the top 5 categories, whilst Relationship With Boss and Role Purpose become more important for males and females respectively. This is discussed in more detail later in the paper.

Ethics and remuneration

The data suggest that both categories are relatively unimportant to participants, ranking between 8th and 12th at both levels of analysis. Clearly, **neither sex within the sample places a particularly high value on Work-life balance or Ethics in their individual constructions of work.**

3.2 Values

Values are superordinate constructs that are highly influential in both self-definition and the moderation of individual thought and action^[79,80].

Values were elicited during the second wave of interviews, with categorisation and rank-ordering shown in **Table 4**.

Table 3. Distribution of all and high salience construct categories by sex.

		All constructs	%	Rank	High salience constructs	%	Rank
Organizational culture	Male	37	55	1	18	58	1
	Female	30	45	2	13	42	1
	Total	67			31		
Team dynamics	Male	22	40	2	12	55	2
	Female	33	60	1	10	45	2
	Total	55			22		
Job satisfaction	Male	16	43	5	10	50	3
	Female	21	57	3	10	50	2
	Total	37			20		
Autonomy	Male	19	51	3	8	50	6
	Female	18	49	5	8	50	6
	Total	37			16		
Recognition	Male	17	47	4	10	50	3
	Female	19	53	4	10	50	2
	Total	36			20		
Relationship with boss	Male	15	45	7	9	69	5
	Female	18	55	6	4	31	9
	Total	33			13		
Role purpose	Male	16	55	5	7	44	7
	Female	13	45	8	9	56	5
	Total	29			16		
Career enhancement	Male	10	45	9	4	33	8
	Female	12	55	10	8	67	6
	Total	22			12		
Challenge of assignment	Male	9	41	10	4	50	8
	Female	13	59	8	4	50	9
	Total	22			8		
Work life balance	Male	5	23	12	1	25	12
	Female	17	77	7	3	75	11
	Total	22			4		
Remuneration	Male	9	47	10	1	13	11
	Female	10	53	11	7	88	8
	Total	19			8		
Ethics	Male	13	68	8	2	50	10
	Female	6	32	12	2	50	12
	Total	19			4		
Personal expertise/ competence	Male	5	50	12	1	100	13
	Female	5	50	13		0	-
	Total	10			1		
Miscellaneous	Male	2	67		-	-	
	Female	1	33		-	-	
	Total	3					
Total	Male	195	47		87	50	
	Female	216	53		88	50	
	Total	411			175		
Total % by gender	Male	47			50		
	Female	53			50		

Table 4. Distribution of values categories by sex.

		Total	%	Rank
Pro-social orientation	Male	44	42	1
	Female	62	58	1
	Total	106		
Pro-work orientation	Male	20	54	2
	Female	17	46	3
	Total	37		
Knowledge, experience & competence	Male	13	42	4
	Female	18	58	2
	Total	31		
Structure & security	Male	14	56	3
	Female	11	44	5
	Total	25		
Self-affirmation	Male	6	27	6
	Female	16	73	4
	Total	22		
Personal & family life	Male	4	27	9
	Female	11	73	5
	Total	15		
Achievement	Male	9	69	5
	Female	4	31	9
	Total	13		
Personal empowerment	Male	5	45	8
	Female	6	55	8
	Total	11		
Personal progress & development	Male	4	36	9
	Female	7	64	7
	Total	11		
Personal challenge	Male	6	86	6
	Female	1	14	10
	Total	7		
Miscellaneous	Male	3	50	
	Female	3	50	
	Total	6		
Total	Male	128	45	
	Female	156	55	
	Total	284		

Both sexes share 4 categories within their top 5, which collectively account for 69% of all female and 71% of all male values. As with constructs, this suggests that **women and men within the sample both derive a relatively high degree of work meaning from broadly the same qualities, in this case by**

finding congruence with their personal values.

Interpersonal relationships

Consistent with findings from the analysis of constructs, Pro-social Orientation ranks highest for both sexes, whilst Pro-work Orientation (which speaks to behaving according to workplace norms) is second for males and third for females. Clearly, **both sexes place a high value on the quality of social interaction at work.**

Male/female stereotyping

Despite a high degree of construction commonality, some sex-based differences are still evident. The analysis shows a higher number of values for women (156, 55% of all values) than for men (128, 45%) The difference of 10% is wider than the 6% seen for ‘All’ constructs and is even more pronounced than the identical totals for both sexes for ‘High Salience’ constructs. This difference is also apparent in the respective distributions for the top 5 values categories by sex; the 5 male categories account for 100 (78% of 128 male values) Whereas the 6 female categories (both 5th-ranked categories are of equal value) account for 135 (86% of 156 female values). Whilst these comparisons might suggest that the construal of work may be a more cognitively complex process for females, involving a greater range and number of considerations than for men, analysis of the two principal components of the construal of work for each of the two cohorts shown in **Table 5** confirms only slightly higher results (90.5%) for female (88.2% male). Principal Component Analysis “... is a technique for accounting for the variance of the ratings of all the constructs in a grid in terms of a smaller number of underlying variables, each one representing a different ‘pattern’ of variance (a ‘Principal Component’). As a measure of cognitive complexity, PCA gives insight into the simplicity or complexity involved in the construal of work” [3,81]. As such, high levels of concentration in the % of variance accounted for by the top two principal components as seen in **Table 5** point to **an equally low degree of cognitive complexity on the part of both sexes in the construal of work.**

Table 5. Principal components analysis.

	Female	Male
Principal Component 1	75.7	74.1
Principal Component 2	14.8	14.1
Total	90.5	88.2

Two variances in the top 5 value categories between the sexes are also noticeable. Achievement is unique to the male cohort, whilst Self-affirmation and Personal & Family Life feature only in the female distribution. In fact, the rankings for Personal and Family Life and Achievement are inverse, with the former being 9th for males and 5th for females, and the latter being 5th for males and 9th for females. This is particularly important given that values tend to be socialised preferences whose origins lie in cultural predispositions.

A number of other relationships may also point to predispositions with social origins. In addition to Achievement, males place higher value on Personal Challenge (ranked 6th, female 10th) and Structure and Security (ranked 3rd, female 5th). Although these variances are relatively small, they are notable.

The possibility that **these relative rankings may speak to socially-defined construction** is considered later in the paper.

4. Discussion

There is a high degree of similarity between the sexes in the construction of work.

The most notable, and arguably the most surprising finding from the research concerns the high degree of similarity in the way that both sexes in the sample construe work. This congruence exists at all levels of construing but deepens with construct salience and is strongest in relation to the (superordinate) values of the sample. The implication, that men and women broadly find similar meaning in similar facets of work and to a similar degree, appears to challenge the popular narrative that the sexes have fundamentally different predispositions to work.

The construal of work is only marginally more complex for women than men.

The finding that a greater number of constructs and values were elicited from women than from men in relation to work speaks to a higher level of female cognitive complexity in its construal. This is consistent with broader research showing that, in general, female cognition is more complex than that of males^[45,48,49] but may also be influenced by the fact that women have a higher tendency than men to define themselves socially, value social endorsement and consider themselves in terms of a social role^[46,50,51]. Principal components analysis revealed, however, a small degree of difference in the extent of construing between females and males, suggesting that the complexity of work considerations for females is no more than marginally greater than for males.

There is some evidence that cultural stereotypes manifest in work (pre) dispositions...

Some data suggests that there is a sex-based cultural demarcation among the sample involved in the research. Although both sexes share a concern for Work-Life Balance at the 'High Salience' construct level, it is a greater concern for women than for men across all constructs. Additional evidence of culturally-defined social roles is also evident in the comparison of values. Here the two categories of Achievement and Work & Family Life rank inversely by sex (5th and 9th respectively for men, and 9th and 5th for women). These data are consistent with the stereotypical view of male and female social roles^[18]. However, their presence and relevance within the findings suggest that they play a part in the construction of work meaning. Nevertheless, it is important to recognise, these roles are eclipsed in significance by other social factors, such as organizational culture, team dynamics, and pro-social orientation, which are shared by the sexes both in type and proportion.

In short, culturally-defined gender roles exist and are psychologically acknowledged, but for this sample, they are not predominant considerations in the construction of work meaning.

...but only limited support for the notion that females are more empathic and collaborative at work.

Both men and women seem to have a similarly low level of cognitive complexity in their mental constructions of work. Broader female considerations appear to include role-relationships ^[46,50,51] and (from the categories found in the research) Personal & Family Life, suggesting that women might be more empathic and collaborative than men in the workplace.

Ethics and Remuneration are minor considerations.

Contrary to conventional wisdom, these categories have a limited impact on the construal of work for both men and women.

5. Conclusions

The findings from this research point to a high degree of congruence in the way both genders construe work. In summary, they share much more than sets them apart. The fact that, to a high degree, both sexes within the sample appear to share the same meaning found in work implies that disparity in representation at senior levels is probably a product of other factors.

The values data hints that (social and organizational) cultural pressures may play a role to some extent in the construction processes involved in the self-legitimization of women as workers. The socially-defined roles espoused in Social Role Theory necessitate a greater mental investment in interpersonal relationships for women than men. This may plausibly explain, to some extent at least, the perception that women are generally more collaborative and empathic than for men in relation to work. Ethics and remuneration are considered lower-order considerations for both sexes.

Our findings have implications for organizational development, particularly for the development of leaders within organizations. The past trend supporting the development of female leaders has been driven by the underlying assumption that women lack personal qualities and competencies necessary in leadership such as negotiation skills or decision-making. The calls for women to emulate autocratic, stereotypically male behaviours were at the core of these assumptions. What the

findings of this study direct our attention to, is that the development of female leaders should move away from this logic and support the creation of environments and mechanisms which will enable women to successfully navigate them towards higher echelons of power. This approach differentiates between leader and leadership development ^[82], with the former being directed at the development of personal skills and qualities to enable the person to better engage with the leadership role and responsibilities while the latter develops leader's ability to navigate relationships and the social environment rather than solely perform functional tasks and responsibilities. While leader development interventions undoubtedly offer value for leaders, they omit the dimension of leadership that occurs in the social capital and political sphere and its navigation requires a different type of knowledge. Therefore, leadership development targets broader capabilities supporting effective engagement with and influencing the social network and relational aspects of work.

This paper supports the view that leadership development is a more suitable route for the training and development female leaders. The demonstrated lack of differences between male and female construals of work provides evidence for abandoning interventions aimed at developing women's basic skills and competencies as a Band-Aid for the larger problem embedded in power structures and gender-biased organizational cultures. The recent emergence and data supporting the effectiveness of compassionate leadership based on traditionally female behaviours as demonstrated by Jacinda Ardern during the COVID-19 pandemic, further points in the direction of the shift away from the promotion of traditionally male and autocratic behaviours in leadership.

Limitations

It is important to remember that the sample comprises a group of professionals in the American company with progressive HR policies and relatively high rates of pay, so it is conceivable that the proportion of employees who are satisfied with

their terms and conditions is much higher than the average. It seems plausible that sensitivity is likely to be heightened by both persistent and material imbalances, particularly in low-paid occupations.

More generally, the relatively narrow geography and industry specificity of the research limits generalisability, such that further research will be necessary to establish validity beyond these domains.

Author Contributions

Dr. Ron Boddy has processed and analysed data elicited during his doctoral work to show variances and similarities in the construal of work by biological sex. Synthesised findings from relevant literature to frame the research question detailed in the text. Summarised findings and conclusions in a draft. Managed redrafting on receipt of comments from co-authors.

Prof. Emeritus Devi Jankowicz's guidance to research design and methodology, along with his help in the interpretation of results, was highly influential in shaping the paper given its constructivist nature.

Prof. Dorota Bourne's academic work has spanned both constructivist psychology and gender, which made her insights and contribution to the reconciliation of both disciplines, alongside her broad understanding of work as a construct, a valuable contribution to the structure and conclusions of the work.

Prof. Mustafa Ozbilgin's contribution was fundamental to aligning the study, particularly its direction, chain of reasoning and conclusions, to contemporary perspectives concerning biological sex and gender equality.

Conflict of Interest

There is no conflict of interest.

Data Availability

Statement Anonymised data is available upon request at the authors' discretion.

Ethics Statement

The primary research was undertaken as part of a study for a doctoral degree. Ethical clearance for the research was given by Edinburgh Business School during the course of the work. Each participant was briefed and signed a consent form prior to being interviewed.

References

- [1] De Vos, A., De Stobbeleir, K., Meganck, A., 2009. The relationship between career-related antecedents and graduates' anticipatory psychological contracts. *Journal of Business Psychology*. 24, 289–298.
DOI:<https://doi.org/10.1007/s10869-009-9107-3>
- [2] Tomprou, M., Nikolaou, I., 2011. A model of psychological contract creation upon organizational entry. *Career Development International*. 16(4), 342–363.
DOI:<https://doi.org/10.1108/13620431111158779>
- [3] Boddy, R.L., 2017. The antecedent roles of personal constructs and culture in the construing of psychological contracts by staff in a Czech financial services company [Ph.D. thesis]. Edinburgh: Edinburgh Business School.
- [4] Boddy, R., Jankowicz, D., 2022. Sociality and the psychological contract of work. *Journal of Constructivist Psychology*. 35(1), 178–198.
DOI:<https://doi.org/10.1080/10720537.2020.1805061>
- [5] Hegel, G.W.F., 2018. *The phenomenology of spirit*. Cambridge University Press: Cambridge.
- [6] Husserl, E., 1962. *Ideas: General introduction to pure phenomenology*. Collier McMillan: New York.
- [7] Kelly, G.A., 1955. *The psychology of personal constructs*. Norton: New York.
- [8] Kelly, G.A., 1963. *A theory of personality: The psychology of personal constructs*. Norton: London.
- [9] Oldehinkel, A.J., 2017. Let's talk about sex—the gender binary revisited. *Journal of Child Psychology and Psychiatry*. 58(8), 863–864.

- DOI:<https://doi.org/10.1111/jcpp.12777>
- [10] Hyde, J.S., Bigler, R.S., Joel, D., et al., 2019. The future of sex and gender in psychology: Five challenges to the gender binary. *American Psychologist*. 74(2), 171–193.
DOI:<https://doi.org/10.1037/amp0000307>
- [11] Hare-Mustin, R.T., Marecek, J., 1988. The meaning of difference: Gender theory, post-modernism, and psychology. *American Psychologist*. 43(6), 455–464.
DOI:<https://doi.org/10.1037/0003-066X.43.6.455>
- [12] Kinsella, H., 2003. For a careful reading: The conservatism of gender constructivism. *International Studies Review*. 5(2), 294–302.
DOI:<https://doi.org/10.1111/1521-9488.5020224>
- [13] Shields, S.A., 2000. Thinking about gender, thinking about theory: Gender and emotional experience. *Gender and emotion: Social psychological perspectives*. Cambridge University Press: Cambridge.
- [14] Gender Wage Gap (Indicator) [Internet]. OECD. Available from: <https://data.oecd.org/earnwage/gender-wage-gap.htm>
- [15] The Glass-ceiling Index [Internet]. The Economist. [cited 2020 Jan 15] Available from: <https://www.economist.com/graphic-detail/2019/03/08/the-glass-ceiling-index>
- [16] Equal Pay for Work of Equal Value [Internet]. UN Women.[cited 2023 May 20] Available from: <https://www.unwomen.org/en/news/in-focus/csw61/equal-pay>
- [17] Bastian, B., Haslam, N., 2006. Psychological essentialism and stereotype endorsement. *Journal of Experimental Social Psychology*. 42(2), 228–235.
DOI:<https://doi.org/10.1016/j.jesp.2005.03.003>
- [18] Eagly, A.H., Wood, W., 2011. Social role theory. *Handbook of theories in social psychology*. Sage: London.
- [19] Kray, L.J., Howland, L., Russell, A.G., et al., 2017. The effects of implicit gender role theories on gender system justification: Fixed beliefs strengthen masculinity to preserve the status quo. *Journal of Personality and Social Psychology*. 112(1), 98–115.
DOI:<https://doi.org/10.1037/pspp0000124>
- [20] Women Score Higher than Men in Most Leadership Skills [Internet]. Harvard Business Review. [cited 2020 Aug 10] Available from: <https://hbr.org/2019/06/research-women-score-higher-than-men-in-most-leadership-skills>
- [21] Pyramid: Women in the United States Workforce [Internet]. [cited 2023 Dec 10] Available from: <https://www.catalyst.org/research/women-in-sp-500-companies/>
- [22] Magnitude and Impact Factors of the Gender Pay Gap in EU Countries [Internet]. European Commission. Available from: <https://op.europa.eu/en/publication-detail/-/publication/aa27ac5b-fc83-11e5-b713-01aa75ed71a1/language-en>
- [23] Maycock, E., Enser, C., Mante, N., et al., 2017. CEO Pay—Is my pay dependent on my gender?. *The International Journal of Business and Management*. 8(5), 233–245.
- [24] Cultural Barriers to Women’s Leadership: A Worldwide Comparison [Internet]. Available from: <https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=a7d1f238439c6d0f822878deba9d4820bda7e374>
- [25] Koenig, A.M., Eagly, A.H., Mitchell, A.A., et al., 2011. Are leader stereotypes masculine? A meta-analysis of three research paradigms. *Psychological Bulletin*. 137(4), 616–642.
DOI:<https://doi.org/10.1037/a0023557>
- [26] Eagly, A.H., Carli, L.L., 2003. The female leadership advantage: An evaluation of the evidence. *The Leadership Quarterly*. 14(6), 807–834.
DOI:<https://doi.org/10.1016/j.leaqua.2003.09.004>
- [27] Yoder, J.D., Schleicher, T.L., McDonald, T.W., 1998. Empowering token women leaders: The importance of organizationally legitimated credibility. *Psychology of Women Quarterly*. 22(2), 209–222.
DOI:<https://doi.org/10.1111/j.1471-6402.1998.tb00151.x>
- [28] Foucault, M., 2012. Discipline and punish: The

- birth of the prison. Penguin: London.
- [29] Trompenaars, F., Hampden-Turner, C., 2014. *Riding the waves of culture: Understanding global diversity in business*. Brealey: London.
- [30] Bierema, L.L., 2016. Women's leadership: Troubling notions of the "ideal" (male) leader. *Advances in Developing Human Resources*. 18(2), 119–136. DOI:<https://doi.org/10.1177/1523422316641398>
- [31] Hoyt, C.L., 2010. Women, men, and leadership: Exploring the gender gap at the top. *Social and Personality Psychology Compass*. 4(7), 484–498. DOI:<https://doi.org/10.1111/j.1751-9004.2010.00274.x>
- [32] Derks, B., Van Laar, C., Ellemers, N., 2016. The queen bee phenomenon: Why women leaders distance themselves from junior women. *The Leadership Quarterly*. 27(3), 456–469. DOI:<https://doi.org/10.1016/j.leaqua.2015.12.007>
- [33] Hofstede, G., Hofstede, J.G., Minkov, M., 2010. *Cultures & organizations: Software of the mind: Intercultural cooperation and its importance for survival* (3rd ed.). McGraw-Hill: New York.
- [34] Ibarra, H., Wittman, S., Petriglieri, G., et al., 2014. *Leadership and identity: An examination of three theories and new research directions*. The Oxford handbook of leadership and organizations. Oxford University Press: Oxford.
- [35] Dick, P., Jankowicz, D., 2001. A social constructionist account of police culture and its influence on the representation and progression of female officers—A repertory grid analysis in a UK police force. *Women Police*. Routledge: London.
- [36] Eddleston, K.A., Powell, G.N., 2008. The role of gender identity in explaining sex differences in business owners' career satisfier preferences. *Journal of Business Venturing*. 23(2), 244–256. DOI:<https://doi.org/10.1016/j.jbusvent.2006.11.002>
- [37] Vial, A.C., Napier, J.L., Brescoll, V.L., 2016. A bed of thorns: Female leaders and the self-reinforcing cycle of illegitimacy. *The Leadership Quarterly*. 27(3), 400–414. DOI:<https://doi.org/10.1016/j.leaqua.2015.12.004>
- [38] McKenzie, B.L., 2018. Am I a leader? Female students leadership identity development. *Journal of Leadership Education*. 17(2).
- [39] Ibarra, H., Ely, R., Kolb, D., 2013. Women rising: The unseen barriers. *Harvard Business Review*. 91(9), 60–66.
- [40] Meister, A., Sinclair, A., Jehn, K.A., 2017. Identities under scrutiny: How women leaders navigate feeling misidentified at work. *The Leadership Quarterly*. 28(5), 672–690. DOI:<https://doi.org/10.1016/j.leaqua.2017.01.009>
- [41] Smith, R., 2018. Gender pay gap in the UK: 2018. ONS: Newport.
- [42] Auspurg, K., Hinz, T., Sauer, C., 2017. Why should women get less? Evidence on the gender pay gap from multifactorial survey experiments. *American Sociological Review*. 82(1), 179–210. DOI:<https://doi.org/10.1177/0003122416683393>
- [43] Piaget, J., 2001. *The language and thought of the child*. Routledge: London.
- [44] Adams-Webber, J.R., Neff, G., 1996. Developmental trends and gender differences in construing the self and parents. *Journal of Constructivist Psychology*. 9(3), 225–232. DOI:<https://doi.org/10.1080/10720539608404667>
- [45] Procaccia, R., Veronese, G., Castiglioni, M., 2014. Self-characterization and attachment style: A creative method of investigating children's construing. *Journal of Constructivist Psychology*. 27(3), 174–193. DOI:<https://doi.org/10.1080/10720537.2014.904701>
- [46] Rucker, M.L., Gendrin, D.M., 2007. Self-construal, interpersonal communication satisfaction, and communication style: Engendering differences. *Human Communication*. 10(4), 437–450.
- [47] Liben, L.S., Bigler, R.S., Ruble, D.N., et al., 2002. The developmental course of gender differentiation: Conceptualizing, measuring, and

- evaluating constructs and pathways. *Mono-graphs of the Society for Research in Child Development*. 67(2).
- [48] Crockett, W.H., 1965. Cognitive complexity and impression formation. *Progress in experimental personality research*. Academic Press: New York. pp. 47–90.
- [49] Halpern, D.F., 2012. Sex differences in cognitive abilities. Taylor & Francis: New York.
- [50] Adams-Webber, J.R., 2001. Cognitive complexity and role relationships. *Journal of Constructivist Psychology*. 14(1), 43–50.
DOI:<https://doi.org/10.1080/10720530125762>
- [51] Guimond, S., Chatard, A., Martinot, D., et al., 2006. Social comparison, self-stereotyping, and gender differences in self-construals. *Journal of Personality and Social Psychology*. 90(2), 221–242.
DOI:<https://doi.org/10.1037/0022-3514.90.2.221>
- [52] Bourne, D., Özbilgin, M.F., 2008. Strategies for combating gendered perceptions of careers. *Career Development International*. 13(4), 320–332.
DOI:<https://doi.org/10.1108/13620430810880817>
- [53] Allen, M.W., Seibert, J.H., Rush, R.R., 1990. Gender differences in perceptions of work: Limited access to decision-making power and supervisory support. *Women's Studies in Communication*. 13(2), 1–20.
DOI:<https://doi.org/10.1080/07491409.1990.11089743>
- [54] Sypher, B.D., Zorn, T.E., 1988. Individual differences and construct system content in descriptions of liked and disliked co-workers. *International Journal of Personal Construct Psychology*. 1(1), 37–51.
DOI:<https://doi.org/10.1080/10720538808412763>
- [55] Coopman, S.J., Hart, J., Allen, M.W., et al., 1997. Detecting cultural knowledge in organization members' personal construct systems. *Journal of Constructivist Psychology*. 10(4), 321–338.
DOI:<https://doi.org/10.1080/10720539708404630>
- [56] Martin, P., Barnard, A., 2013. The experience of women in male-dominated occupations: A constructivist grounded theory inquiry. *SA Journal of Industrial Psychology*. 39(2).
- [57] Rousseau, D.M., 1995. Psychological contracts in organizations: Understanding written and unwritten agreements. Sage: Thousand Oaks.
- [58] Cavanaugh, M.A., Noe, R.A., 1999. Antecedents and consequences of relational components of the new psychological contract. *Journal of Organizational Behavior*. 20(3), 323–340.
DOI:[https://doi.org/10.1002/\(SICI\)1099-1379\(199905\)20:3<323::AID-JOB901>3.0.CO;2-M](https://doi.org/10.1002/(SICI)1099-1379(199905)20:3<323::AID-JOB901>3.0.CO;2-M)
- [59] Coyle-Shapiro, J., Kessler, I., 2000. Consequences of the psychological contract for the employment relationship: A large scale survey. *Journal of Management Studies*. 37(7), 903–930.
DOI:<https://doi.org/10.1111/1467-6486.00210>
- [60] Rousseau, D.M., 1990. New hire perceptions of their own and their employer's obligations: A study of psychological contracts. *Journal of Organizational Behavior*. 11(5), 389–400.
DOI:<https://doi.org/10.1002/job.4030110506>
- [61] Guest, D.E., Conway, N., 2003. The psychological contract, health and well-being. *The handbook of work and health psychology* (2nd ed.). Wiley: Chichester.
- [62] Rousseau, D.M., McLean Parks, J., 1993. The contracts of individuals and organizations. *Research in Organizational Behavior*. 15, 1–43.
- [63] Banks, S., 2014. Delving into promises: Conceptually exploring the beliefs constituting the contemporary psychological contract. *Journal of Management & Organization*. 20(4), 544–566.
DOI:<https://doi.org/10.1017/jmo.2014.42>
- [64] Conway, N., Guest, D., Trenberth, L., 2011. Testing the differential effects of changes in psychological contract breach and fulfillment. *Journal of Vocational Behavior*. 79(1), 267–276.
DOI:<https://doi.org/10.1016/j.jvb.2011.01.003>
- [65] De Vos, A., Buyens, D., Schalk, R., 2005. Making sense of a new employment relationship:

- Psychological contract-related information seeking and the role of work values and locus of control. *International Journal of Selection and Assessment*. 13(1), 41–52.
DOI:<https://doi.org/10.1111/j.0965-075X.2005.00298.x>
- [66] Nichols, G., 2013. The psychological contract of volunteers: A new research agenda. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*. 24, 986–1005.
DOI:<https://doi.org/10.1007/s11266-012-9294-9>
- [67] Bal, P.M., Jansen, P.G., Van der Velde, M.E., et al., 2010. The role of future time perspective in psychological contracts: A study among older workers. *Journal of Vocational Behavior*. 76(3), 474–486.
DOI:<https://doi.org/10.1016/j.jvb.2010.01.002>
- [68] De Hauw, S., De Vos, A., 2010. Millennials' career perspective and psychological contract expectations: Does the recession lead to lowered expectations?. *Journal of Business and Psychology*. 25, 293–302.
DOI:<https://doi.org/10.1007/s10869-010-9162-9>
- [69] Metz, I., Kulik, C.T., Brown, M., et al., 2012. Changes in psychological contracts during the global financial crisis: The manager's perspective. *The International Journal of Human Resource Management*. 23(20), 4359–4379.
DOI:<https://doi.org/10.1080/09585192.2012.667432>
- [70] Anderson, N., Schalk, R., 1998. The psychological contract in retrospect and prospect. *Journal of Organizational Behavior*. 19, 637–647.
- [71] Jankowicz, D., 2001. Why does subjectivity make us nervous?: Making the tacit explicit. *Journal of Intellectual Capital*. 2(1), 61–73.
DOI:<https://doi.org/10.1108/14691930110380509>
- [72] Bakker, A.B., Albrecht, S.L., Leiter, M.P., 2011. Work engagement: Further reflections on the state of play. *European Journal of Work and Organizational Psychology*. 20(1), 74–88.
DOI:<https://doi.org/10.1080/1359432X.2010.546711>
- [73] Robinson, S.L., Kraatz, M.S., Rousseau, D.M., 1994. Changing obligations and the psychological contract: A longitudinal study. *Academy of Management Journal*. 37(1), 137–152.
- [74] Veage, S., Ciarrochi, J., Deane, F.P., et al., 2014. Value congruence, importance and success and in the workplace: Links with well-being and burnout amongst mental health practitioners. *Journal of Contextual Behavioral Science*. 3(4), 258–264.
DOI:<https://doi.org/10.1016/j.jcbs.2014.06.004>
- [75] Jankowicz, A.D., 2003. How can we understand one another if we don't speak the same language? *International handbook of personal construct psychology*. John Wiley & Son: Chichester. pp. 359–366.
- [76] Fransella, F., Bell, R., Bannister, D., 2004. *A manual for repertory grid technique*. Wiley: Chichester.
- [77] Jankowicz, A.D., 2003. *The easy guide to repertory grids*. Wiley: Chichester.
- [78] Honey, P., 1979. The repertory grid in action: How to use it to conduct an attitude survey. *Industrial and Commercial Training*. 11(11), 452–459.
DOI:<https://doi.org/10.1108/eb003756>
- [79] Horley, J., 1991. Values and beliefs as personal constructs. *International Journal of Personal Construct Psychology*. 4(1), 1–14.
DOI:<https://doi.org/10.1080/08936039108404758>
- [80] Horley, J., 2012. Personal construct theory and human values. *Journal of Human Values*. 18(2), 161–171.
DOI:<https://doi.org/10.1177/0971685812454484>
- [81] Groth, D., Hartmann, S., Klie, S., et al., 2013. *Principal components analysis. Computational toxicology. Methods in molecular biology*. Humana Press: Totowa, NJ.
DOI:https://doi.org/10.1007/978-1-62703-059-5_22
- [82] Day, D.V., 2000. Leadership development: A review in context. *The Leadership Quarterly*. 11(4), 581–613.
DOI:[https://doi.org/10.1016/S1048-9843\(00\)00061-8](https://doi.org/10.1016/S1048-9843(00)00061-8)