

Title: Using supplied personality trait constructs in studying abstract and interpersonal self roles.

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Using supplied personality trait constructs in studying abstract and interpersonal self roles.

ABSTRACT

This study aims to demonstrate whether a selection of supplied personality constructs based on Lee and Ashton's (2004) HEXACO model can be used to effectively understand a range of self roles, with a comparison of how more specific interpersonal roles (me with friends, me with family, me when studying) differ in their relationship to exploration and well-being outcomes when compared to more abstract self roles (me generally, me as I would like to be). A sample of 41 participants were recruited via opportunity sampling of undergraduate students at the University of West London (UWL) during 2018. 35 participants were female, with 6 being male, mean age of the sample was 24.17. Variables measured include the interpersonal self role ratings for the supplied personality constructs, comfortable and experimental behaviour styles, curiosity/exploration and measures of well-being including satisfaction with life, positive affect, and negative affect. The findings supported distinct interpersonal roles being present based on supplied construct data (in support of Churchyard et al., 2013), but with overlap between some self roles where consistency in trait behaviour is generally tied into better psychological functioning. In terms of considering patterns unique to concrete interpersonal selves and more abstract selves, whilst many correlations patterns with behaviour style and wellbeing measures were similar between the me generally and more specific interpersonal roles, the specific interpersonal self roles could then be used to pick out which aspects of the self were contributing to these relationships. For example, Me generally (Openness to Experience) was negatively correlated with Negative affect, but the main concrete interpersonal role that correlated negatively was Me when studying specifically.

INTRODUCTION

Within Personal Construct Theory research the use of supplied personality constructs (constructs developed based on an existing or pre-developed model of trait personality) in studying how the individual perceives themselves and their world has been debated (Churchyard, Pine, Sharma & Fletcher, 2013; Grice, 2004; Grice, Jackson & McDaniel, 2006; McDaniel and Grice, 2005), with the outcome generally being that supplied constructs are only useful if administered in conjunction with eliciting unique personal constructs (those elicited using an elicitation procedure). Studies conducted using both elicited unique and supplied constructs have generally found that there is only a 50% overlap in the variance in personal constructs that can be explained by supplied constructs (Grice, 2004; Grice, Jackson & McDaniel, 2006), although Churchyard, Pine, Sharma and Fletcher (2013) highlight that the overlap varies considerably by participant. This brings into question how useful supplied constructs can be within personal construct theory approaches.

Using supplied constructs in personal construct research

McDaniel and Grice (2005) examined the use of supplied constructs measuring the Big Five traits to facilitate assessing self-discrepancies in larger, more generalisable samples using a repertory grid format, however they found that the self-discrepancies (in ‘actual self’, ‘ideal self’ and ‘ought self’) in supplied trait markers had limited relation to psychological well-being factors with only actual self-ideal self discrepancies in extraversion and conscientious displaying consistent relations to anxiety and depression (positively), and self-esteem (negatively). McDaniel and Grice did discuss a number of factors that could have affected the outcomes of this study though including the model the supplied construct markers were based on (the Big Five markers developed by Goldberg, 1992) and the college sample collected being in a life position where there may not display much discrepancy in the self roles examined.

Watson and Watts (2001) also examined discrepancies in the self (‘real self’, ‘ideal real self’, ‘social self’ and ‘ideal social self’) using both personal and supplied construct markers (based on the seven factor Adjective Check list developed by Gough & Heilbrun, 1983, cited in Watson & Watts, 2001) in relation to neuroticism. This found that the discrepancies in real actual/ideal self roles for the personal construct markers were found to positively predict neuroticism, whilst supplied construct markers did not. However, when the social self discrepancies were examined this did find that only discrepancies in supplied construct markers positively predicted neuroticism for female participants, while only discrepancies in personal construct markers positively predicted neuroticism for male participants. While these findings are in line with McDaniel and Grice (2005) initially suggesting limited impact of supplied constructs, this also finds that within specific self-construing contexts supplied constructs may be just as useful as unique constructs. This suggests a particular range of convenience for supplied constructs, i.e., those contexts that veer towards greater engagement with

others and therefore more shared common ground between people, in line with the sociality and commonality corollaries (Kelly, 1955). McDaniel and Grice (2005) self-discrepancies correlating only with extraversion and conscientiousness would also support this. The outcomes of the Watson and Watts (2001) study also suggest that as the context of the self role becomes less abstract (e.g., 'real social self' is a little less abstract than 'real self'), the supplied constructs become more useful.

To review a recent study where more specific interpersonal self role elements have been used, Churchyard, Pine, Sharma and Fletcher (2013) examined Euclidean distances between a selection of three interpersonal self roles, 'me with a good friend', 'me with a close family member' and 'me with a person in authority' calculated using both unique personal constructs and supplied constructs (the latter based on Lee & Ashton, 2006, HEXACO model of personality). The larger the Euclidean distance, the greater the discrepancy between self roles. These self roles were examined in relation to cognitive complexity indices (Bieri, PVAFF and Intensity), anxiety, depression and behavioural flexibility. This found that distances between 'me with a good friend' and 'me with a close family member', and 'me with a good friend' and 'me with a person in authority' were positively related to anxiety for both unique and supplied constructs separately. When both unique and supplied constructs were combined to calculate distances the 'me with a close family member' and 'me with a person in authority' distance was also positively correlated to anxiety, with stronger positive correlations of all distances to anxiety found. The strength of the correlations of distances between interpersonal self roles to anxiety were greater than those found by McDaniel and Grice (2005) using discrepancies between abstract self roles, although these were found in a much smaller sample size. Consistent negative correlations were found between the distances and cognitive complexity indices (lower scores on the complexity indices indicating greater cognitive complexity in construing). This suggests that greater distances in construing the self roles were related to a higher level of cognitive complexity. Greater distances between self roles were linked to greater cognitive complexity in construing, but also greater levels of reported anxiety. To explain why correlations were found between distances and cognitive complexity, distances and anxiety, but not cognitive complexity indices and anxiety Churchyard et al, (2013) hypothesised a form of meta-construing that actually displaying variation in behaviour across interpersonal situations, while perceiving oneself to be variable is connected to anxiety, whilst not perceiving this variation (seeing oneself as behaving in a stable manner according to the situation encountered) is linked to cognitive complexity. Furthermore Churchyard et al., (2013) found that those whose personal constructs converged to a greater degree with the supplied constructs in the HEXACO model were also less cognitively complex. This highlights not only the importance of self roles administered being specific to interpersonal contexts when examining these in relation to psychological well-being, but it also shows the supplementary connection between personal and supplied constructs when considering cognitive complexity.

Rationale

The preceding discussion suggests that supplied constructs are particularly useful in research using self role elements tied into social contexts (Churchyard et al., 2013; Watson and Watts, 2001, also acknowledging Mair 1977, cited in Butt, 2013; proposal of a community of selves), however personal construct research often uses self role elements that are rather abstract (possibly due to their wider range of convenience). This study aims to demonstrate whether a selection of supplied constructs based on Lee and Ashton's (2004) HEXACO model can be used to effectively understand a range of interpersonal self roles (five in total), with a comparison of how more specific interpersonal roles (me with friends, me with family, me when studying) differ in their relationship to exploration and well-being outcomes when compared to more abstract self roles (me generally, me as I would like to be).

METHOD

Participants

A sample of 41 participants were recruited via opportunity sampling of undergraduate students (first and second year) at the University of West London (UWL) in 2018 using the SONA participation system. 35 participants were female, with 6 being male. The mean age of the sample was 24.17 with an age range of 18 to 48, which is in line with the student demographic of UWL. The smaller sample was collected due to the idiographic nature of the study (more focus on each individual, with a greater variety of interpersonal self roles than standard cross-sectional personality research).

Design/Materials/Procedure

A cross-sectional study was conducted using a correlational, survey design with data collection hosted online via the Qualtrics system platform. Variables measured include the interpersonal self role ratings for the supplied personality constructs, comfortable and experimental behaviour styles, curiosity and measures of well-being including satisfaction with life, positive affect, and negative affect. British Psychological Society ethical considerations were followed (Informed consent before participation, debriefing after the measures were completed, and being informed of their rights to confidentiality and to withdraw at any time), and the study was approved by the UWL School of Human and Social Sciences Ethics panel. The following measures were included:

Interpersonal self role ratings for the selection of supplied personality constructs were provided for each of the following five roles: Me generally, Me as I would like to be, Me when I'm with friends, Me with family, Me when I'm studying. The supplied personality constructs were based on the HEXACO model (Honesty-Humility, Emotional stability, Extraversion, Agreeableness, Conscientiousness and Openness to Experience) were the same 12 administered in Churchyard, Pine, Sharma and Fletcher (2013). These supplied constructs were: Insincere – Sincere (H), Unfair – Fair (H), Fearful – Fearless (E), Dependent on others – Independent (E), Unsociable – Sociable (Ex), Calm – Lively (Ex), Harsh – Gentle (A), Patient – Impatient (A), Disorganised – Organised (C), Impulsive – Prudent (C), Uncreative – Creative (O), Conventional – Unconventional (O). Each construct was rated on a 1 – 7 scale, with 7 reflecting the extreme of the adjective on the right, with 1 reflecting the extreme of the adjective on the left side.

Comfortable and Experimental Behaviour Styles scales (Churchyard & Buchanan, 2017). This consists of 20 items, 10 to tap into a comfortable behaviour style (e.g., "I like to stick to the things I know"), and another 10 items to tap into an experimental behaviour style (e.g., "I like to explore new ways of doing things"). Participants were asked to suggest to what extent each statement described them using a Likert scale from 1="Not at all like me" to 5="Very much like me".

Measures of well-being including the Satisfaction With Life Scale (SWLS, developed by Diener, Emmons, Larsen, & Griffin, 1985) and the Positive and Negative Affect Schedule (PANAS, developed by Watson, Clark & Tellegen, 1988). The SWLS consists of 5 items examining participants general satisfaction with life (e.g., “So far I have gotten the important things I want in life”). Participants rated the items using a 7-point Likert scale from 1 (“Strongly disagree”) to 7 (“Strongly agree”). The Positive and Negative Affect Schedule (PANAS) contains 20 adjectives looking into positive affect (e.g., Excited, Proud – 10 items) and negative affect (e.g., Upset, Afraid – 10 items). Participants rated the items using a 5-point scale from 1 (“Very slightly”) to 5 (“Extremely”). The instructions were given for the participants to indicate general mood, rather than any specific timepoint, occasion or situation.

The Curiosity and Exploration inventory-II contains 10 items looking into tendencies towards being socially inquisitive and seeking out new experiences (e.g. “I am always looking for experiences that challenge how I think about myself and the world”), measured on a 5-point scale of Very Slightly Or Not At All (1) to Extremely (5) (Kashdan et al., 2009).

All questionnaire measures have been previously established as psychometrically sound in the publications noted, while the supplied construct markers have previously been used in Churchyard, Pine, Sharma and Fletcher (2013).

RESULTS

Based on a smaller sample size ($n = 38$ to 41), a non-parametric analysis approach was used. In order to examine how the different interpersonal self roles were related to the behaviour style and wellbeing outcomes, we first established whether there were significant differences in scores between all of the self roles (Me generally, Me as I would like to be, Me when I'm with friends, Me with family, Me when I'm studying) within each specific trait measured (e.g., Extraversion as one specific trait) by using six different Friedman tests. This found that there were overall significant differences in participants scores on each role within each supplied trait at the $p < .01$ level. Follow up pairwise comparisons using Wilcoxon tests within each of the six supplied traits found significant differences between many of the self roles, but not all of them suggesting some overlap between roles with 20/60 pairwise comparisons not being significant. Fourteen of these overlaps can be accounted for by the Honesty-Humility (4), Emotional Stability (4), the Conscientiousness self roles (6), where more consistency across roles is likely to be psychologically/behaviourally beneficial. With Conscientiousness in particular differences were only displayed when the Me as I would like to be role was considered. The above suggests that each of these five self roles can be treated as practically distinct from each other.

Spearman correlations were then reported between the interpersonal self roles and the behaviour style and wellbeing outcomes. These are presented in Table 1. Where significant correlations are present these are generally in the expected direction, although consistent with distinctions between the interpersonal self roles, not every correlation was significant. The most common significant correlating interpersonal self roles were the Me with family and Me while studying roles, although some correlations for Me with friends being related to Positive affect (Conscientiousness and Openness to Experience), and Satisfaction with Life and Curiosity/Exploration (Openness to experience) were found. Where correlations were significant, higher scores on the interpersonal self roles (reflecting the more psychologically adept functioning on the personality characteristics) were generally tied into scores on the wellbeing outcomes reflecting greater psychological wellbeing. The exception was the positive correlation between Me as I would like to be (Agreeableness) and Negative affect, which may suggest a discrepancy between participants me currently self roles and the ideal self on the Agreeableness supplied constructs. The Wilcoxon test results all supported this, with scores on current self roles all being significantly lower than scores on me as I would like to be for the Agreeableness supplied constructs (all $p < .001$).

The Spearman correlations for the two behavioural styles suggest that a Comfortable behaviour style was also tied into higher scores on the Me generally (Conscientiousness) self role, although this trend was not observed for the specific interpersonal self roles on the Conscientiousness supplied constructs which further supports distinctions in how the interpersonal self is perceived when compared to the

general self. Correlations of the Experimental behaviour style were found with higher scores on the Me generally and Me studying (Openness to experience), and lower scores on Me as I would like to be (Agreeableness). This suggests that participants may perceive having an experimental behaviour style as being at odds with an agreeable ideal, although there was no evidence to suggest that having a comfortable behaviour style corresponded with a more agreeable perception of the ideal self.

Table 1: Spearman correlations between the interpersonal self roles within each supplied trait and the behavioural style and wellbeing outcomes.

Interpersonal self roles	Comfortable behaviour style	Experimental behaviour style	Positive affect	Negative affect	Satisfaction with life	Curiosity
Me generally_HH	.27	.17	.36*	-.13	.04	.18
Me as I would like to be_HH	.08	.00	-.06	.15	-.13	-.01
Me when I'm with friends_HH	-.14	.02	.23	-.07	-.08	.04
Me with family_HH	.06	.16	.26	.05	.18	.17
Me when I'm studying_HH	.15	.25	.59***	-.23	.15	.24
Me generally_EM	-.16	.20	.46**	-.45**	.20	.19
Me as I would like to be_EM	.00	-.12	-.03	.14	-.18	-.06
Me when I'm with friends_EM	-.16	.22	.20	-.17	.08	.16
Me with family_EM	.02	.26	.58***	-.31*	.26	.28
Me when I'm studying_EM	-.11	.13	.59***	-.44***	.25	.19
Me generally_EX	-.09	.25	.32*	-.52**	.22	.30
Me as I would like to be_EX	-.16	.02	-.12	.12	-.17	-.09
Me when I'm with friends_EX	-.13	.24	.25	-.20	.08	.21
Me with family_EX	-.03	.11	.30	-.19	.08	-.01
Me when I'm studying_EX	.05	.22	.09	-.45**	.20	.22
Me generally_AG	.03	-.14	.22	-.08	.09	.07
Me as I would like to be_AG	.13	-.33*	-.16	.36*	-.19	-.16
Me when I'm with friends_AG	.09	-.26	-.03	.09	-.02	-.15
Me with family_AG	-.03	-.03	.29	.00	.31*	.16
Me when I'm studying_AG	.04	.12	.51**	-.27	.16	.35*

Interpersonal self roles	Comfortable behaviour style	Experimental behaviour style	Positive affect	Negative affect	Satisfaction with life	Curiosity
Me generally_CS	.36*	-.15	.50**	-.28	.32*	-.04
Me as I would like to be_CS	.22	-.14	.01	.26	-.06	-.09
Me when I'm with friends_CS	.19	-.03	.38*	-.12	.28	.06
Me with family_CS	.10	.11	.48**	-.23	.41**	.21
Me when I'm studying_CS	.08	.25	.66***	-.31	.34*	.24
Me generally_OTE	-.24	.50**	.54***	-.39*	.49**	.68***
Me as I would like to be_OTE	-.19	.09	.10	-.02	-.02	.21
Me when I'm with friends_OTE	-.22	.18	.34*	-.06	.32*	.44**
Me with family_OTE	-.24	.29	.39*	-.23	.36*	.50**
Me when I'm studying_OTE	.04	.34*	.58***	-.39*	.43**	.48**

Note: Statistically significant values are reported as follows: *= $p < .05$, **= $p < .01$, ***= $p < .001$.

DISCUSSION

Mair (1977 as cited in Butt, 2013) discussed the idea of a community of selves, a collection of varied self-representations that together form the self, rather than there just being one “true or authentic self”(pg 25). Butt, Burr and Bell (1997, cited in Butt, 2013) explored this by eliciting a range of interpersonal self roles to use as elements from each participant in their study, although this required the use of structured interviews in a small group of participants only. Butt et al., (1997) found that a stable self-concept did involve the participant having a range of different self roles that conducted themselves in different ways. This suggests that to tap into the potential many selves an individual may display, a range of different self role elements are needed. This is when supplied constructs may become particularly useful. The findings supported this, with distinct interpersonal roles being present based on supplied construct data (in support of Churchyard et al., 2013), but with overlap between some self roles where consistency is generally tied into better psychological functioning. The most commonly correlating self roles with the behaviour style and wellbeing measures were the Me generally, Me with family and Me while studying roles. A possible lack of preference for an experimental behaviour style is noted in those experiencing negative affect who also aspire to be more agreeable, based on the negative correlation of an Experimental behaviour style with Me as I would like to be Agreeableness, along with Me as I would like to be Agreeableness positive correlation to Negative affect. There was a medium strength negative correlation between the Experimental behaviour style and Negative affect, although this was not found to be statistically significant ($r_s = -.31, p > .05$). In terms of considering patterns unique to concrete interpersonal selves (me with friends, me with family, me when studying) and more abstract selves (me generally, me as I would like to be) whilst many correlations patterns with behaviour style and wellbeing measures were similar between the me generally and more specific interpersonal roles, the specific interpersonal self roles could then be used to pick out which aspects of the self were contributing to these relationships. For example, Me generally (Openness to Experience) was negatively correlated with Negative affect, but the main concrete interpersonal role that correlated negatively was Me when studying specifically. There were some instances where a relationship was only found in abstract self roles; Me generally (Extraversion) and Positive Affect, and Me generally (Conscientiousness) and a Comfortable Behaviour style, and the previously mentioned relationships of Me as I would like to be Agreeableness. The first two correlations support findings by McDaniel and Grice (2005) regarding the importance of extraversion and conscientiousness supplied constructs when considering abstract self role outcomes. McDaniel and Grice examined actual self-ideal self discrepancies with discrepancies tied into negative wellbeing, supporting the findings of this research. One set of relationships was found unique to the specific interpersonal role Me when studying (Agreeableness) where positive correlations were observed with Positive Affect and Curiosity/Exploration. Overall this suggests that both abstract self roles and more concrete self roles should be utilised in future

research with supplied constructs. Abstract (non-specific) roles are effective in detecting correlations with other outcomes, while concrete roles can be used to narrow down the most relevant interpersonal contexts tied into the outcomes.

As noted earlier on the sample size is quite small for this project although this is not unusual for more idiographic/individual focused research, however a non-parametric analysis approach was still taken to accommodate for this. The sample is biased towards female participants, but the correlations found with the emotional stability interpersonal self roles (with family and while studying) to Positive/Negative affect in this sample do support the findings of Watson and Watts (2001) though, where social self discrepancies in supplied constructs in particular were able to detect correlation with Neuroticism in female participants. Our research did also find that Me generally (a narrow parallel of the actual self) emotional stability was tied into Positive/Negative affect. The analysis approach outlined in this study can certainly act as a template for (partial) replication studies which may also require smaller samples with more time invested by each individual participant into completing the study. A large number of analyses have also been conducted which does raise the risk of type one errors, so a reader interpreting these results with caution could choose to only focus on those significant at $p < .01$ level. It can be argued that for a more elaborate comparison that personal constructs should also have been elicited from participants as well (as in Churchyard et al., 2013, and Watson & Watts, 2001), however participants were already being asked to complete a large number of measurements and concerns regarding attrition rates, along with knowing what has already been established by Churchyard et al., (2013), and Watson and Watts (2001) about differences between personal and supplied constructs led the researcher to focus purely on supplied constructs for this study.

A key reason for why supplied constructs should be used in personal construct research more frequently going forward is for logistical reasons, as with numerous different self roles it becomes more challenging to elicit personal constructs that fit the range of convenience of being applicable across all interpersonal self role elements to some degree. The use of supplied constructs allows for a stable comparison set of constructs between the different self roles to help distinguish them from each other appropriately. There are approaches within personal construct theory where the labels for different selves are developed through exploratory factor analysis of unique personal construct ratings across many elements. This does require a large number of personal constructs to be elicited in the first place though which is not always possible for time consumption reasons, particularly if a sizable sample of participants are being recruited. The use of supplied constructs can also help to supplement the personal constructs elicited, in order to provide a healthy range of constructs from which to form these labels for different selves.

Supplied constructs as a bridge to mainstream personality literature

The trait personality literature also supports the distinctions that individuals make in their conduct when rating supplied traits markers or constructs across different interpersonal contexts. These come in the form of trait personality inventories that include multiple interpersonal self roles (Robinson, 2009), examine consistency in reported behaviour between interpersonal self roles (Church et al., 2008), perceptions of suitability of traits to interpersonal roles (Church, Katigbak & del Prado, 2010) or provide a questionnaire with instructions or items linked to a particular interpersonal context (Schaffer and Postelthwaite, 2012 provides a meta-analysis of this within the “at work” context). Diary studies in which momentary records of personality traits are referred to as personality states, also finds variation in displayed personality which is thought to revolve around a “density distribution of states” (a term coined by Fleeson, 2001). This variation was frequently predicted by interpersonal context or situation markers (Bleidorn, 2009; Churchyard, Pine, Sharma & Fletcher, 2018; Fleeson, 2007; Heller et al., 2007 to list a few examples). The use of supplied constructs as a part of personal construct research allows the findings to be more easily integrated within the wider literature on personality, giving the area of personal construct theory greater exposure to mainstream personality literature audiences (as the Grice, 2004; and Grice, Jackson & McDaniel, 2006, studies do).

Both the personal construct theory literature and trait theory literature can reach an integrated understanding of the self and report of personality through providing an interpersonal context for participants to define themselves, allowing for the community of selves to present itself.

REFERENCES

- Bleidorn, W. (2009). Linking Personality States, Current Social Roles and Major Life Goals. *European Journal of Personality, 23*, 509-530.
- Butt, T. (2013). The Psychology of Personal Construct: Humanism Without a Self (English original version). *Rivista Italiana di Costruttivismo, 1*, (1), 20-31.
- Church, A. T., Katigbak, M. S., Reyes, J. A. S., Salanga, M. G. C., Miramontes, L. A., & Adams, N. B. (2008). Prediction and cross-situational consistency of daily behavior across cultures: Testing trait and cultural psychology perspectives. *Journal of Research in Personality, 42*, (5), 1199-1215. doi:10.1016/j.jrp.2008.03.007.
- Church, A. T., Katigbak, M. S., & del Prado, A. M. (2010). Cultural similarities and differences in perceived affordances of situations for big five behaviours. *Journal of Research in Personality, 44*, 78-90.
- Churchyard, J. S., Pine, K. J., Sharma, S., & Fletcher, B. (C). (2013). Construction by interpersonal context, and relationship to psychological outcomes. *Journal of Constructivist Psychology, 26* (4): 306-315. doi:10.1080/10720537.2013.792301
- Churchyard, J. S., Pine, K. J., Sharma, S., & Fletcher, B. (C). (2018). Variation in personality states as predicted by interpersonal context. *Journal of Individual Differences. doi:10.1027/1614-0001/a000271*
- Churchyard, J. S., & Buchanan, K. (2017). Which way to well-being: More of the same or trying something novel? The association of comfortable and experimental behavior styles to well-being. *Personality and Individual Differences, 109*: 35-43. doi: 10.1016/j.paid.2016.12.037
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction with Life Scale. *Journal of Personality Assessment, 49*, (1), 71-75. doi: 10.1207/s15327752jpa4901_13
- Fleeson, W. (2001). Towards a structure- and process-integrated view of personality: Traits as density distributions of states. *Journal of Personality and Social Psychology, 80*, 1011-1027.

- Fleeson, W. (2007). Situation-based contingencies underlying trait-content manifestation in behavior. *Journal of Personality, 75*, (4), 825-861.
- Goldberg, L. R. (1992). The development of markers for the Big-Five factor structure. *Psychological Assessment, 4*, (1) 26–42. doi: 10.1037/1040-3590.4.1.26
- Grice, J. W. (2004). Bridging the Idiographic-Nomothetic Divide in Ratings of Self and Others on the Big-Five. *Journal of Personality, 72*, (2), 203-241.
- Grice, J. W., Jackson, B. J., & McDaniel, B. L. (2006). Bridging the Idiographic-Nomothetic Divide: A Follow-up Study. *Journal of Personality, 74*, (4), 1191-1218.
- Heller, D., Komar, J., & Lee, W. B. (2007). The Dynamics of Personality States, Goals and Well-Being. *Personality and Social Psychology Bulletin, 33*, 898-910.
- Kashdan, T. B., Gallagher, M. W., Silvia, P. J., Winterstein, B. P., Breen, W. E., Terhar, D., & Steger, M. F. (2009). The curiosity and exploration inventory-II: Development, factor structure, and psychometrics. *Journal of Research in Personality, 43*, 987–998.
- Kelly, G. A. (1955, 1991). *The Psychology of Personal Constructs* (in 2 volumes). London: Routledge.
- Lee, K., & Ashton, M. C. (2004). Psychometric properties of the HEXACO Personality inventory. *Multivariate behavioral research, 39*, (2), 329-358. doi: 10.1207/s15327906mbr3902_8
- McDaniel, B. L., & Grice, J. W. (2005). Measuring Self Discrepancies on the Big-five Personality Traits with the Repertory Grid. *Personal Construct Theory & Practice, 2*, 18-31.
- Robinson, O. C. (2009). On the Social Malleability of Traits Variability and Consistency in Big 5 Trait Expression Across Three Interpersonal Contexts. *Journal of Individual Differences, 30*, (4), 201-208. doi: 10.1027/1614-0001.30.4.201
- Schaffer, J. A., & Postelthwaite, B. E. (2012). A Matter of Context: A Meta-analytic Investigation of the Relative Validity of Contextualised and Non-contextualised Personality Measures. *Personnel Psychology, 65*, 445-494.

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, *54*, 1063-1070.

Watson, N., & Watts Jr, R. H. (2001). The Predictive Strength of Personal Constructs Versus Conventional Constructs: Self-Image Disparity and Neuroticism. *Journal of Personality*, *69*, (1), 121-145.