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Is the *Homo Ludens* Cheerful and Serious at the Same Time? An Empirical Study of Hugo Rahner's Notion of *Ernstheiterkeit*

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Summary

The theologian Hugo Rahner argued that the *homo ludens* is a man of '*Ernstheiterkeit*' (serious-cheerfulness), a person who can smile under tears but also recognizes the gravity in all earthly cheerfulness. The primary aim of this study was to test the validity of this notion: Do *homines ludentes* exist? Two hundred sixty-three adult subjects were measured for (1) seriousness and cheerfulness and (2) playfulness. Results provided unequivocal support for Rahner's thesis. Numerous subjects scored high in both seriousness and cheerfulness thus confirming the existence of *homines ludentes*. It was further found that these subjects were among those scoring highest in playfulness. Subjects scoring high in cheerfulness but low in seriousness were, however, even more closely associated with playfulness. The scores for *homines ludentes* did not differ from the rest of the subjects in the creative and dynamic facets of playfulness. The importance of developing empirical research to investigate hypotheses derived from non-scientific concepts is discussed.

Keywords

Adult playfulness; cheerfulness; *Ernstheiterkeit*; seriousness

In his book *Man at Play*, the Roman Catholic theologian Hugo Rahner (1948, 2008) argues that the *homo ludens* is a man of *Ernstheiterkeit*. This German neologism consists of the words *Ernst* for serious or seriousness and *Heiterkeit* for cheerfulness or mirth. It needs to be pointed out that *Heiterkeit* is not the German word for 'joy'; the German word for joy is *Freude*. According to

Rahner, the ‘serious-cheerful person’ is a person whose humour runs from deep to shallow; a person who smiles even under tears and/but also recognizes the serious nature of cheerfulness (Rahner, 2008, p. 29). The cheerfulness of the *homo ludens* springs from the rock of his solemnity and it is only from this solid foundation that profound cheerfulness can spring. Rahner sees play as an effortless, transcendent experience:

[...] a man released from the trammels of self and capable of self-surrender, a man whose disappointments have turned into fun, a man with the easy step of one who has the earth at his feet and who no longer—by taking them too seriously—disfigures any of the values of this world—a homo vere ludens (Rahner, 1965, p. 4).

One thinks of ‘Zorba the Greek’. Rahner sees the playful person—the *ernstheitere* (serious-cheerful) person—as a Christian ideal, which can be approached via the practice of the virtue of *eutrapelia* (Rahner, 1954, 2008; see also Aristotle, 2000).

In considering the element of playfulness in theology, Rahner, writing a half a century ago, is clearly prophetic. It has been often pointed out that Jesus is never represented in the Bible as laughing or enjoying humour (Morreall, 1983), and, until recently, Christian theologians have had little good to say about playfulness. St. John Chrysostom, the fourth-century Archbishop of Constantinople, suggested that although a playful attitude itself is not sinful, it easily leads to sin (Schaff, 1889). During the middle ages, the institution of ‘the carnival,’ in which social and ecclesiastical roles were relativized and reversed, was one of the few instances in which the element of play entered the official life of the church (Räwel, 2005). Writing in the 18th century, Sören Kierkegaard (1910) considered ‘playfulness’ to be an integral component of the Christian life, but was much less specific than Rahner as to what playfulness operationally meant. More recently, Harvey Cox (1973) made medieval carnival practices the cornerstone of his theology treatise, *The Feast of Fools*. Some ‘post-modern’ theologians are following Rahner’s lead in taking a more kindly attitude towards playfulness, with some even considering playfulness to be a cardinal virtue (Caputo, 1997; Kaufmann, 2004).

This study is an attempt to empirically test Rahner’s notion that *Ernstheiterkeit* (seriousness-cheerfulness) characterizes the seriously playful person, the *homo ludens*. Rahner (2008) sees this juxtaposition as an integral component of the Christian life.

The notions of ‘serious cheerfulness’ or ‘cheerful seriousness’ sound nearly oxymoronic at first, but due respect to Rahner, who motivated us to determine

the extent to which ‘seriousness’ and ‘cheerfulness’ can coexist as state-trait variables and then to see how these relate to the trait ‘playfulness.’

Earlier commentators on the psychology of religion suggested that religiousness relates negatively to characteristics that are typically associated with humour; playfulness being one of these (Saroglou, 2002; see also Capps, 2006; Saroglou & Jaspard, 2001). In a more direct test of the relation, Proyer and Ruch (2011) found no observable relationships between a global measure for playfulness (Proyer, 2012b) and a scale measuring religiousness as a strength of character (i.e., a morally positively valued trait; Peterson & Seligman, 2004). However, when considering different facets of playfulness in a multidimensional instrument (Glynn & Webster, 1992), there was about a 9% overlapping variance with religiosity as a character strength. Additionally, several more recent scholars have described ludic elements in religious rituals (Cox, 1973; Oerter, 1999; Versteeg, 2006) and it would seem that Rahner’s estimation of cheerfulness, seriousness and playfulness as important, if not essential, elements of the Christian psyche may have been prescient.

While there is voluminous research on *play* (as a behaviour) in infants and children (e.g., Barnett, 1990, 1991a, 1991b; Lieberman, 1977), comparatively few studies are available on playfulness (as a personality disposition) in adults (e.g., Barnett, 2007, 2012; Proyer, 2012a, 2012b, 2012c). Barnett (2007, p. 955) defines playfulness as “[...] the predisposition to frame (or reframe) a situation in such a way as to provide oneself (and possibly others) with amusement, humor, and/or entertainment.” Only recently has scholarly interest in this personality characteristic evolved again.

Among other reasons, this interest is associated with the emergence of positive psychology as a new discipline. It has, for example, been argued that play and playfulness facilitate the emergence of positive emotions (Fredrickson, 2001), and that these, in turn, increase the level of well-being. Peterson and Seligman (2004) proposed a classification of 24 strengths of character and six hierarchically higher ordered virtues. In this classification, *humour* is introduced as a synonym for *playfulness* (see Proyer & Ruch, 2011): a strength of character, which is assigned to the hierarchically higher ordered virtue of *transcendence*; see, for example, Caputo (1997) and Kaufmann (2004) for arguments of playfulness as being a cardinal virtue. Peterson and Seligman (2004) argue that this virtue enables people to experience a feeling of participation in the universe at large and a meaning for life (see Beermann & Ruch, 2009; Müller & Ruch, 2011).

A number of studies have exhibited the benefits of playfulness in, for example, coping with stress (Qian & Yarnal, 2011), academic performance (Proyer,

2011), intrinsic motivation (Amabile, Hill, Hennessey & Tighe, 1994; Proyer, 2012c), creativity and spontaneity (Barnett, 2007; Glynn & Webster, 1992, 1993; Proyer, 2012a, 2012b, 2012c), quality of life (Proyer, Ruch & Müller, 2010), or job satisfaction and performance, innovative behaviour and positive attitudes towards the workplace (Glynn & Webster, 1992, 1993; Yu, Wu, Chen & Lin, 2007). The possible benefits of *Ernsttheiterkeit* (serious-cheerfulness) have, of course, not been investigated in any of these studies—and most certainly not from the theological perspective of Rahner (2008).

In a somewhat related field, namely humour-research, however, the combination of seriousness and cheerfulness has already been addressed. Ruch, Köhler, and van Thriel (1996) showed that *cheerfulness*, *seriousness*, and *bad mood* are temperamental parameters closely related to the presence or absence of a sense of humour; they can be seen as its temperamental basis. These components represent habitual dispositions for lowered (cheerfulness) and elevated (seriousness, bad mood) thresholds for the induction of exhilaration and laughter. Hence, cheerfulness facilitates the expression of humour (e.g., being in a cheerful mood, endorsing cheerful interaction styles, or having a low threshold for smiling and laughter), whereas seriousness tends to form the substrate for serious states (e.g., a perception of everyday happenings as important, grave or ponderous). In a study in 1994, Ruch found that the combination of cheerfulness (*surgency*) and serious-mindedness in a person were related to specific forms of her/his sense of humour. With respect to the relationship of cheerfulness and playfulness to humour, McGhee (1996) considered humour to be a special variety of playfulness (see also Proyer & Ruch, 2011), namely playfulness with ideas.

Playfulness (or rather, the inclination to play) has been related to greater levels of cheerfulness; in earlier studies (Köhler & Ruch, 1996) and, more recently, Ruch and Hofmann (2012) argue that “cheerfulness enables individuals to engage easily in playful and cheerful interactions and therefore fosters interpersonal bonds” (p. 101). Due to experience derived from focus groups, Barnett (2007) identified being *cheerful* as one of the characteristics of playful adults. Proyer (2012b) found a positive relationship between cheerfulness and playfulness and, at the same time, negative associations with seriousness. There were, however, no analyses conducted for seriousness and cheerfulness combined.

Another clear finding of this study was that that cheerfulness and playfulness are not synonymous: i.e., cheerfulness does not equal playfulness. This means that seriousness cannot be seen as the opposite of playfulness but rather, the opposite of playfulness is ‘nonplayfulness’. Studies investigating the basic

structure of playfulness uncovered elements of playfulness which can be seen as independent from both cheerfulness and seriousness. There are, for example, facets of playfulness relating to spontaneity and creativity that exist without relationship to cheerfulness and seriousness (e.g., Proyer, 2012a).

All these refinements aside, however, it seemed reasonable to expect that playfulness would be globally akin to cheerfulness but not necessarily to seriousness, and indeed our aim in this study was to test Rahner's (2008) claim that a positive relationship between playfulness on the one hand, and elevated levels of both cheerfulness *and* seriousness on the other hand, coexist in a personality type that he refers to as *homo ludens*.

The application of the *State-Trait-Cheerfulness-Inventory* (Ruch, Köhler & van Thriel, 1996) allows for the empirical testing of how seriousness and cheerfulness (*Ernstheiterkeit*) relate to various characteristics of the *homo ludens*—here operationalized as a subject scoring high in 'playfulness.' Playfulness was assessed by employing three different measures; namely, (a) the *Short Measure of Adult Playfulness* (SMAP) (Proyer, 2012b) as an indicator for an easy onset and high intensity of playful experiences along with the frequent display of playful activities; (b) Glynn and Webster's (1992, 1993) *Adult Playfulness Scale* (APS), which tests *creative* (e.g., imaginative, active), *spontaneous* (e.g., impulsive), *expressive* (e.g., bouncy, open), *fun* (e.g., bright, excitable), and *silly* variants (e.g., childlike, whimsical) of playfulness; and (c) a scale derived from descriptors of highly playful people as proposed by Barnett (2007, 2012). This last scale is used to measure the intensity of four global factors or facets of playfulness: *gregarious* (e.g., outgoing, sociable), *uninhibited* (e.g., unpredictable, adventurous), *comedic* (e.g., funny, humorous), and *dynamic* (i.e., active and dynamic).

The use of this combination of tests allowed for the determination of which characteristics of the *homo ludens* were more strongly related to seriousness and cheerfulness than others and which facets of playfulness are true reflections of *Ernstheiterkeit* (serious-cheerfulness). Common sense alone would suggest that participants who scored high in cheerfulness and low in seriousness would be found to be particularly playful (see Barnett, 2007; Proyer, 2012b, 2012c). Common sense alone, however, could not answer the question as to whether subjects who scored high in cheerfulness *and* seriousness would also be found to be 'playful'—and that question is one of the essential questions of this study: Are there people who score high in cheerfulness and seriousness and are also playful? This question is tantamount to asking, "Do *homines ludentes* exist?" The answer is not obvious.

One can imagine ‘seriously cheerful’ people (i.e., *homines ludentes*) as being either playful or not playful, or as some of them being playful and some of them not. Would common sense suggest that professional football ‘players’ are more playful or more serious? One approach to answering these questions is the present study.

The main aim of the present study was to test the relationships among seriousness, cheerfulness and various facets of playfulness. Based on earlier works it was expected that cheerfulness would be positively and seriousness would be negatively associated with playfulness at the level of bivariate correlations. If, however, Rahner’s notion of *humor ludens* is a valid one, not only subjects scoring high in cheerfulness, but also those scoring high in both cheerfulness and seriousness (the combination of these two personality traits being the operationalization of Rahner’s concept of *Ernstheiterkeit*) would likewise be characterized by exhibiting higher levels of playfulness. Some earlier studies reported greater levels of playfulness in younger people but no gender differences (e.g., Proyer 2012b, 2012c). Therefore, we controlled for age in all our analyses.

Method

Sample

The sample consisted of 93 adult men and 170 women between 18 and 85 years of age ($M = 32.9$, $SD = 14.2$; 17 did not provide information on their age). About one-third (34.1%) were married or lived with a partner, 58.3% were single, 1.5% were widowed, and 5.7% were divorced or separated. Compared with the general population, the educational status of the sample was rather high with slightly more than half (51.9%) having a degree from an academic university or a university of applied sciences, a further 18.6% had a diploma qualifying them for university study; 23.1% had completed vocational training, while the rest had basic grade school educations; 1.1% did not provide information on their educational status.

Instruments

The trait form of the *State-Trait-Cheerfulness-Inventory* (STCI-T) (Ruch, Köhler & van Thriel, 1996) consists of 106 items in a four-point answer format (1 = *strongly disagree*, 4 = *strongly agree*) and assesses *cheerfulness* (e.g., “I like

to hear the newest jokes and funny stories”), *seriousness* (“I very seldom act without a proper reason”), and *bad mood* (“People often have reason to ask if something is bothering me”). For the present study, only the cheerfulness and seriousness scale were relevant; nonetheless the full standard test was administered to the participants in order to maintain the psychometric properties of the scale. The STCI-T demonstrated good psychometric properties in earlier studies (e.g., Carretero-Dios, Eid, & Ruch, 2011; Sarid, Melzer, Kurz, Shahar & Ruch, 2010). Alpha coefficients in this sample were .94 for cheerfulness and .90 for seriousness.

The *Short Measure of Adult Playfulness* (SMAP) (Proyer, 2012b) consists of five items that allow for a global assessment of adult playfulness. A sample item is, “I am a playful person.” High scores in the SMAP indicate an easy onset and high degree of pleasure related to playful experiences along with a frequent display of playful activities. All items are positively keyed. The SMAP utilizes a four-point scale (1 = *strongly disagree*, 4 = *strongly agree*). Proyer reports the best fit for a one-dimensional solution of the data (in exploratory and confirmatory factor analyses) and high internal consistencies ($\geq .80$ in three different samples). Data on validity and data from a more experimental task (ratings for workplaces and pieces of art) also support the overall usefulness of the instrument (see also Proyer, 2012c; Ruch & Proyer, 2011). The alpha-coefficient in this study was .84.

The *Adult Playfulness Scale* (APS) (Glynn & Webster, 1992) is a list of 32 adjectives (ratings are given on a seven-point scale, and 25 items are being scored) with which the subjects score themselves. Its subscales are *spontaneous* (e.g., spontaneous vs. disciplined; alpha-coefficient in this sample = .76), *expressive* (e.g., bouncy vs. staid; $\alpha = .68$), *fun* (e.g., bright vs. dull; $\alpha = .61$), *creative* (e.g., imaginative vs. unimaginative; $\alpha = .63$), and *silly* (e.g., childlike vs. mature; $\alpha = .73$). Glynn and Webster report satisfactory reliability coefficients and data on convergent and predictive validity. As in earlier studies (Proyer, 2011, 2012a, 2012b, 2012c; Proyer & Ruch, 2011), the German version of the instrument was used.

A *list of playfulness statements* was created using 15 adjectives identified by Barnett (2007) as being indicative for playfulness. They were rephrased into items (e.g., ‘active’ into ‘I am an active person’; 1 = *strongly disagree*, 4 = *strongly agree*). Items were aggregated as suggested by Barnett (2007); this provides scores for four scales; i.e., *gregarious* (5 items for cheerful, happy, friendly, outgoing, sociable; $\alpha = .74$ in this sample), *uninhibited* (spontaneous, impulsive, unpredictable, adventurous; $\alpha = .71$), *comedic* (clowning, joking/teasing,

funny, humorous; $\alpha = .74$), and *dynamic* (active and energetic; $\alpha = .69$). These items have been used earlier in research (e.g., Barnett, 2012; Proyer, 2012b; Quian & Yarnal, 2011).

Procedure

Students in a course on psychometrics collected the data as part of the course requirements. They distributed the questionnaires among their friends and family as well as to people in public places (e.g., train stations, or shopping malls). Participants were not paid for their services but were informed that their contribution would help answer basic research questions. All data were collected in paper-pencil format and participants either returned the questionnaires directly to the experimenters or sent them back via post.

Results

Preliminary analyses revealed that the various indicators of playfulness converged well without being redundant. The SMAP correlated between $r(262) = .35$ (expressive) and $.43$ (fun; all $p < .001$) with the APS and between $r(256) = .22$ (dynamic) and $.54$ (comedic; all $p < .001$) on the Barnett-scale. The APS correlated between $r(256) = .29$ (uninhibited and fun) and $.61$ (gregarious and fun; all $p < .001$) on the Barnett-scale. Exceptions were relations between silly-playfulness (APS) and Barnett's gregarious-factor ($r = .10$) and dynamic-factor ($r = -.01$), which were uncorrelated (*n.s.*).

Further analyses showed that some of the variables varied with demographics. For example, seriousness increased with age ($r(245) = .25$, $p < .001$) while silly-forms of playfulness correlated with younger age, $r(262) = -.33$, $p < .001$. Only one of the variables yielded gender-differences: Women ($M = 4.21$, $SD = 0.93$) scored lower than men ($M = 4.46$, $SD = 0.82$) in their expressive playfulness, $t(262) = 0.69$, $p < .05$; $d = 0.29$. Despite this difference, which was comparatively small (in terms of the effect size), it was decided to control only for the effects of age in the subsequent analyses.

The Relation between Seriousness, Cheerfulness, and Playfulness

For a first evaluation of the relationship between cheerfulness and seriousness (the degree of *Ernsttheiterkeit*) as compared with the various indicators of playfulness, the cheerfulness and seriousness-scales were correlated with the SMAP, the APS, and the scale derived from Barnett (2007). Partial correla-

Table 1. Relationship between Cheerfulness, Seriousness, and Bad Mood and Different Indicators of Playfulness (Controlled for Age)

Playfulness	Cheerfulness	Seriousness
<i>SMAP</i>	.49**	-.39**
<i>APS</i>		
Spontaneous	.51**	-.51**
Expressive	.36**	-.28**
Fun	.71**	-.43**
Creative	.43**	-.11
Silly	.19	-.41**
<i>Barnett</i>		
Gregarious	.73**	-.24**
Uninhibited	.24*	-.26**
Comedic	.61**	-.48**
Dynamic	.39**	.08

Notes: N = 257-263. SMAP = Short Measure of Adult Playfulness; APS = Adult Playfulness Scale; Barnett = scale emulated from Barnett (2007).

* $p < .01$; ** $p < .001$.

tions, which control for age were computed and the p -values were adjusted to account for multiple comparisons (Bonferroni-correction; see Table 1).

Table 1 shows that an easy onset and high intensity of playful experiences along with the frequent display of playful activities (SMAP) was associated with greater levels of cheerfulness ($r^2 = .24$) and lower levels of seriousness ($r^2 = .15$). This pattern repeated itself in other measures that entered the study, but there were exceptions. For example, silly-variants of playfulness existed independently from cheerfulness (and bad mood). Also, the uninhibited-factor from the Barnett (2007) scale yielded comparatively numerically low associations with cheerfulness ($r^2 = .06$) and the dynamic variants of playfulness were uncorrelated with seriousness.

It should, however, be mentioned that some of the correlation coefficients seemed almost unrealistically high. For example, $\geq .71$ between fun-oriented and gregarious-playfulness and cheerfulness. This is at least partly due to an overlap in the measurements inasmuch as *cheerful* is one of the characteristics of playful people identified by Barnett (2007). The SMAP does not cover such characteristics, but is a more direct measure of playfulness—in this sense, these relations are the least biased by content overlap.

Overall, it was evident that at the level of bivariate correlations, playfulness was positively correlated with higher levels of cheerfulness and lower levels of seriousness, thus confirming the conclusion reached by common sense alone. For describing these relations further, a regression analysis was conducted (not shown in full detail) with playfulness (SMAP) as criterion and age (Step 1) and cheerfulness and seriousness (Step 2) as predictors. This analysis yielded a $R^2 = .27$, $F(3, 243) = 30.64$, $p < .001$. The incremental contribution of cheerfulness was largest ($\Delta R^2 = .18$, $\beta = .37$, $p < .001$) but seriousness also contributed further to the prediction ($\Delta R^2 = .04$, $\beta = .20$, $p < .01$).

Examining the Ernstheiterkeit “factor”

In a further step of the analysis, groups were created based on their expressions of cheerfulness and seriousness. Cheerfulness and seriousness of the STCI were split into three equal groups of low scorers (the lowest third of the distribution), those in a medium range (middle third), and high scorers (highest third). These scores were aggregated into nine groups; i.e., (Group A) scoring low in cheerfulness (CH) and seriousness (SE; $n = 16$); (Group B) scoring middle in SE, low in CH ($n = 29$); (Group C) high SE, low CH ($n = 40$); (Group D) middle CH, low SE ($n = 24$); (Group E) middle CH, middle SE ($n = 28$); (Group F) middle CH, high SE ($n = 28$); (Group G) high CH (low SE; $n = 41$); (Group H) high CH, middle SE ($n = 25$); and (Group I) high SE, high CH ($n = 15$).

The rationale behind this analysis was that if Rahner’s (2008) notion of *Ernstheiterkeit* (serious-cheerfulness) reflects characteristics of the *homo ludens*, at least some of the subjects in Group I should score high in ‘playfulness’. This was tested by means of an Analysis of Covariance (ANCOVA) comparing the nine groups in their playfulness (for all three questionnaires) with the ages of the participants as a covariate. In case age did not have a significant effect, an Analysis of Variance (ANOVA) was computed without further considering age as a covariate. Table 2 shows means and standard deviations for each of the groups.

A first inspection of the mean scores revealed that groups that scored either high in cheerfulness (Group G) or high in cheerfulness and in the middle range of seriousness (Group H), or those being *ernstheiter* (high in seriousness and cheerfulness; Group I), scored numerically highest in most of the indicators of playfulness.

Although those exhibiting cheerfulness (and low seriousness) were numerically highest (except for dynamic components and generally less so in the dimensions of the questionnaire derived from Barnett, 2007) they only

Table 2. Mean Level Differences in Playfulness in Groups Differentiated Based on their Expression in Seriousness and Cheerfulness

	A		B		C		D		E		F		G		H		I				
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD			
SMAP [†]	2.55 _{abcd}		0.14	2.50 _{aefg}	0.10	2.42 _{beh}		0.09	2.96 _{ijk}	0.11	2.69 _{chlmn}	0.10	2.59 _{dghl}	0.10	3.31	0.09	2.95 _{jno}	0.11	2.96 _{kno}	0.14	
APS																					
SPO	4.20 _{abcde}		0.83	3.70 _{gh}		0.72	3.36 _f		0.86	4.60 _{aijk}	0.79	4.26 _{lm}	0.70	3.76 _{egin}	0.90	5.13	0.86	4.48 _{djlo}	0.86	4.11 _{eklmno}	0.93
EXP	4.03 _{abcde}		0.81	4.09 _{afgh}		0.86	3.85 _{bfi}		0.70	4.40 _{egilm}	1.09	4.36 _{dijnop}	0.67	4.52 _{kn}	0.59	5.00	0.80	4.60 _{loq}	0.71	4.18 _{emnpq}	0.99
FUN	4.78 _{ab}		0.60	4.30 _c		0.66	4.15 _c		0.56	5.18 _{def}	0.60	5.08 _{adgh}	0.47	4.69 _{bg}	0.60	5.67	0.51	5.48 _{ci}	0.62	5.26 _{fhi}	0.55
CRE	4.73 _{ab}		0.79	4.64 _a		0.94	5.22 _{bfg}		0.81	5.36 _{cdehijk}	0.93	5.29 _{chl}	0.88	5.39 _{dhlmn}	1.02	5.84 _{cop}	0.80	5.64 _{finoq}	0.84	5.51 _{gknpq}	0.77
SIL [†]	3.76 _{abcdef}		0.21	3.53 _{ghij}		0.15	3.11 _{klm}		0.13	3.84 _{bgnopq}	0.17	3.49 _{chknrs}	0.15	3.03 _{tc}	0.16	4.11 _{do}	0.13	3.63 _{eipru}	0.17	3.34 _{fipouqr}	0.21
BPS																					
GRE	2.84 _{ab}		0.57	2.93 _a		0.41	2.84 _b		0.39	3.26 _{cd}	0.42	3.32 _{cef}	0.36	3.34 _{deg}	0.40	3.70 _h	0.29	3.65 _{hi}	0.30	3.46 _{igi}	0.47
UNI	2.84 _{abcdefg}		0.67	2.68 _{ahijklm}		0.57	2.42 _{hinopq}		0.53	2.66 _{binrstu}	0.66	2.63 _{djorvw}	0.59	2.69 _{dkpsvxy}	0.67	2.97 _z	0.52	2.97 _{itxz}	0.47	2.53 _{gmquwxyz}	0.41
COM [†]	3.01 _{abcde}		0.10	2.87 _{af}		0.08	2.49		0.07	3.24 _{ghij}	0.09	3.14 _{gji}	0.08	2.88 _{dflk}	0.08	3.46 _i	0.06	3.40 _{il}	0.08	3.14 _{eijk}	0.11
DYN	2.53 _{ab}		0.33	2.74 _{acde}		0.71	2.91 _{cfig}		0.69	2.66 _{adef}	0.57	3.00 _{eghi}	0.53	3.22 _{hijkl}	0.53	3.30 _{jmn}	0.49	3.38 _{kno}	0.48	3.29 _{lno}	0.59

Note: Group A = low in seriousness (SE) and cheerfulness (CH; $n = 17/1$ did not specify his or her gender); Group B = middle range of SE, low CH ($n = 30/1$); Group C = high SE, low CH ($n = 41/1$); Group D = middle cheerfulness, low SE ($n = 26/2$); Group E = middle in SE and CH ($n = 31/3$); Group F = middle in CH, high in SE ($n = 30/2$); Group G = high CH, low SE ($n = 45/4$); Group H = high CH, middle SE ($n = 26/1$); Group I = high CH, high SE (*Ernstheiterkeit*; $n = 17/2$); M = Mean; SD = Standard deviation; SMAP = Short Measure of Adult Playfulness (Proyer, 2012); APS = Adult Playfulness Scale (Glynn & Webster, 1992)—spontaneous (SPO), expressive (EXP), fun-oriented, creative (CRW), and silly (SIL)—variants of playfulness; BPS = Barnett Playfulness Scale (emulated from Barnett, 2007)—gregarious (GRE), uninhibited (UNI), comedic (COM), and dynamic (DYN).

[†] Adjusted mean scores (ANCOVA)

^{a-z} Means sharing a superscript do not differ from each other.

exceeded those being *ernstheiter* in creative playfulness and dynamic components. Hence, it seems as if the combination of seriousness and cheerfulness could, as Rahner (2008) suggested, be associated with greater playfulness.

If tested empirically, age had a significant effect on the SMAP; $F(1, 237) = 7.12, p < .01$, partial $\eta^2 = .03$. The nine groups differed significantly from each other; $F(8, 237) = 9.48, p < .0001$, partial $\eta^2 = .24$. Table 2 shows that for the SMAP, those being high in cheerfulness (and low in seriousness) exceeded all other groups. The largest difference in the mean scores was found for the group that was serious (and low in cheerfulness), and the smallest differences were found in those being *ernstheiter* (serious-cheerful), those being high in cheerfulness and in a medium range of seriousness, and to those being medium cheerful but low in seriousness.

For a more thorough evaluation of the relations of *Ernstheiterkeit* with playfulness, several operationalizations (in the APS and the scale derived from Barnett, 2007) were also subjected to the same analysis as reported for the SMAP. Age did not have an effect on mean level differences for spontaneous playfulness. Hence, a one-way ANOVA has been computed, which indicated that the nine groups (means and standard deviations are given in Table 2; comparisons are for the least significant difference (LSD) post hoc-test) differed significantly from each other, $F(8, 253) = 15.98, p < .001$. For this type of playfulness, again, the cheerful group was highest (being different from all other groups). Thus, spontaneous playfulness was not a prime characteristic of those being *ernstheiter* (serious-cheerful).

It was somewhat surprising to find that age did not have a significant effect for expressive playfulness. The ANOVA revealed significant mean level differences in the groups, $F(8, 254) = 7.10, p < .001$. Results of the post hoc-test were similar with respect to the spontaneous variants of playfulness; those being cheerful (and low in seriousness) were higher than any of the other groups. Those being *ernstheiter* (serious-cheerful) were not different from any of the other groups. Age did not contribute to the differentiation of the fun-variants of playfulness and an ANOVA indicated mean level differences among the nine groups; $F(8, 254) = 28.21, p < .001$. Those being high in cheerfulness (and low in seriousness) exceeded all other groups in fun-oriented playfulness. Those being *ernstheiter* (serious-cheerful) yielded the numerically third highest mean scores and seemed to embody this type of playfulness.

Creative playfulness did not vary with age. An ANOVA with creative playfulness indicated mean level differences among the groups; $F(8, 254) = 5.89, p < .001$. This variant of playfulness was in line with Rahner's reasoning.

Although those high in cheerfulness and low in seriousness had the numerically largest means, they differed neither from those being *ernstheiter* (serious-cheerful) nor from those being high in cheerfulness, and they showed medium expressions in seriousness. It should, however, be mentioned that those high in seriousness (and low in cheerfulness) did not differ from those being *ernstheiter* and high cheerful-medium serious participants. Age had a significant effect on the silly-variants of playfulness; $F(1, 237) = 17.45, p < .0001$, partial $\eta^2 = .79$. The groups differed significantly from each other; $F(8, 237) = 5.47, p < .0001$, partial $\eta^2 = .16$. In a comparison of the adjusted means, those high in cheerfulness exceeded all other groups except for those being low in cheerfulness and low in seriousness and those with medium expressions in cheerfulness and low expressions in seriousness. Those being *ernstheiter* (serious-cheerful) were lower than the cheerful (low seriousness) group, but did not differ from any other group. It seems reasonable that a variant of playfulness that, perhaps, explicitly excludes seriousness (childlike behaviour) does not appeal to those being serious and cheerful.

Age did not contribute to the differentiation of Barnett's (2007) gregarious-type of playfulness. The ANOVA revealed mean level differences among the groups; $F(8, 248) = 21.89, p < .001$. Post hoc tests indicated that those high in cheerfulness (and low in seriousness) exceeded all other groups (with the exception of high cheerful and medium serious participants). The data suggest that the serious-minded people scored low in gregarious types of playfulness. The uninhibited-factor also did not vary with age and the ANOVA revealed mean level differences; $F(8, 248) = 3.44, p < .01$. Again, the cheerful but also the cheerful and the medium-serious scored highest in this type of playfulness. Those being *ernstheiter* (serious-playful) were among the numerically lowest scoring. There was an effect of age for the comedic scale; $F(1, 232) = 15.14, p < .001$, partial $\eta^2 = .06$. Also the groups differed from each other; $F(8, 232) = 17.44, p < .001$, partial $\eta^2 = .38$. While those high in cheerfulness and low in seriousness scored highest, those being *ernstheiter* (serious-playful) also yielded numerically high mean scores. Behaving comically was lowest in those being serious (and not cheerful) and their scores were lower than any of the other groups. Finally, there were no age differences for the dynamic-factor but the groups differed in their means; $F(8, 248) = 7.48, p < .001$. For this factor, Rahner's suggestion of the playful person is in line with expectations. Although those high in cheerfulness (and low in seriousness) scored numerically highest, the scores for those being *ernstheiter* (serious-cheerful) did not differ from those in the cheerfulness (low seriousness) group.

Discussion

This is the first study to empirically test Hugo Rahner's (2008) contention that *Ernstheiterkeit* (seriousness-cheerfulness) is one of the defining characteristics of the *homo ludens* and that *homine ludentes* do indeed exist. The findings reported here support this claim.

Although subjects who were cheerful only (without also being serious) were numerically highest in most of the facets of playfulness, those being *ernstheiter* (serious and cheerful) were among the numerically highest scoring groups in most of the variants of playfulness. Seriousness alone was an indicator of low playfulness. The correlation coefficients also showed that low seriousness does not overlap with playfulness; a good indication that nonplayfulness does not equal seriousness. Nevertheless, high levels of seriousness in combination with high levels of cheerfulness allow playfulness to occur. One might argue that the balance between seriousness and cheerfulness is important for the emergence of playfulness. Of course, this study does not test whether those being *ernstheiter* (serious and cheerful at the same time) experience a special transcendent experience but we provided evidence that the *homo ludens* can also be conceptualized in these terms. A next step would now be to test whether those being high in serious and cheerfulness also experience spirituality and religiosity differently than, for example, those being cheerful only. Overall, it needs to be emphasized that the relationship between seriousness and playfulness seems to be more complex than one might have concluded from the inspection of bivariate correlations alone.

It needs to be acknowledged that only for the creative and the dynamic variants of playfulness were there no differences in the mean scores between those being high in cheerfulness and low in seriousness and those being high in both. Hence, one might argue that *Ernstheiterkeit* (seriousness-cheerfulness) reflects a creative, imaginative, but also active and energetic approach to playfulness. This may be the type of playfulness incorporated by artists, creators and the religiously faithful, who focus on developing and creating something that they consider significant without necessarily being cheerful while doing so: one thinks of Beethoven or John Calvin. This also seems to be in line with earlier work strongly relating this type of playfulness to openness to experience or culture of the Big Five-taxonomy (Proyer, 2012c), which is a comprehensive representation of basic personality traits. Furthermore, creative playfulness was uncorrelated with seriousness; this suggests that both degrees—high or low seriousness—might concur with this variant of playfulness. A common characteristic of creative and dynamic aspects of playfulness seems to be an

activity component. One might argue that these types of playfulness help enable something else; a creative process, perhaps, or some other cognitive activity. At a broader level, one might argue that these may also be the component of the human capacity for play, which have been seen as an integral element in the definition of religion by some scholars (Droogers, 2006). At an empirical level, these aspects may reflect what Rahner (2008) had in mind with his notion of the *homo ludens* as a person of *Ernsttheiterkeit*.

The operationalization of the *homo ludens* as a person being high in playfulness can, of course, be debated. Each of the inventories employed has specific advantages and disadvantages. Nevertheless, since the results converge well—but nonetheless reflect specifics in each of the instruments—and inasmuch as earlier studies provide support for the validity of the instruments, this operationalization can be considered a theory-based approximation. It was evident that there would be an overlap in the measurement of cheerfulness and playfulness. As mentioned above, this overlap leads to inflated correlation coefficients that need to be considered when interpreting the findings.

Additionally, the question arises as to what this overlap means at a conceptual level. For future studies other operationalizations that cover the various facets of playfulness (e.g., those related to intellectual capacity or romantic partnerships) (Proyer, 2012a) may be useful for further understanding these relationships. Additionally, this study may also illuminate which factors determine the occurrence playfulness. Future research on playfulness may need to consider the interaction between playfulness and seriousness. In any case, reducing adult playfulness to behaviours described as childlike, fun-oriented, or silly seems inadequate.

The ‘translation’ of theoretical work to empirical work has obvious limitations. When analysing the data, *cheerfulness* and *seriousness* were conceptualized from a psychological perspective in terms of the framework of Ruch et al. (1996). It needs to be acknowledged that the exact meanings and connotations of such concepts can vary among disciplines (e.g., theology, philosophy, etc.). When applying empirical methods to test specific ideas from literary or theological essays, it needs, of course, to be acknowledged that scientific research cannot cover the full range of reasoning in another discipline—in this case, Rahner’s theology (2008). Dialogue between Charles Snow’s ‘two cultures’ (1959) is never easy, but holds dynamic promise available to neither ‘culture’ alone.

To carry out this type of research, it is necessary to break down broad concepts into smaller pieces that can be tested, and it must be acknowledged that in this process of fragmentation, the essence of the larger concept may be diminished or lost. It is the hope of interdisciplinary research that this must

not always necessarily be the case. The present study does not pretend to address all of the topics raised in Rahner's essay and, most certainly, not of Rahner's work in general.

Finally, the question arises as to whether the operationalization of Rahner's concept of *Ernstheiterkeit* as 'seriousness-cheerfulness' might be a predictor, not only for playfulness but for other personality characteristics as well. Variables such as quality of life, subjective well-being, positive/negative affect, but also other characteristics, such as divergent and convergent thinking come to mind. In the religious dimension, one might imagine that *homines ludentes* would gravitate toward the more liberal end of the 'conservative-liberal' spectrum away from fundamentalists, an idea that might be worth evaluating when one considers the current threat of fundamentalism-driven terrorism.

This study should also be understood as a plea for more in-depth research on such relatively 'lost dimensions' as cheerfulness and playfulness in the psychology of religion. In these times made treacherous by zealous religious fundamentalists from all persuasions, Hugo Rahner's suggestion that being deeply serious about one's religion not only does not exclude light-heartedness but demands it, seems vitally important. Via playfulness, the psychology of religion might also develop a liaison with evolutionary biology in which 'playful behaviour' among non-human animals has obvious survival benefits (Gervais & Wilson, 2005). The element of playfulness in the various religions of the world and of playfulness as an integral psychological component of the individual believer should not remain uninvestigated.

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