Theory of Planned Behaviour: the Intention-Behaviour Relationship and the Perceived Behavioural Control (PBC) Relationship with Intention and Behaviour

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Abstract: The present paper is a presentation of the Theory of Planned Behaviour Ajzen [1], a model widely applied in a wide range of behavioural applications in social psychology. According to the model people behave according with their intentions and perceptions of control over the behaviour. Intentions are formulated by attitude towards the behaviour, a personal factor, and a social factor, subjective norm, perceived social pressures from significant others to perform the behaviour and the actors’ motivation to comply with the referents. Attitude and subjective norm are in turn determined by the salient beliefs people hold about the behaviour. The TPB extends the Theory of Reasoned Action (TRA) by including a third determinant of intention and behaviour, perceived behavioural control (PBC). PBC is assumed to reflect past experience with the performance of the behaviour and anticipated obstacles that could inhibit behaviour. However in terms of explanatory value, predictive accuracy and practical utility of the model it is significant when and under which conditions the intention-behaviour relationship demonstrates stability, an issue discussed in the current paper. In the same line an issue further discussed is about the moderators of the relationship of perceived behavioural control (PBC) with intention and behaviour, again with implications about the explanatory value, the predictive accuracy and the practical utility of the model.

Keywords: Theory of Planned Behaviour; Intentions-Behaviour Relationship; Perceived Behavioural Control –Behaviour Relationship.

1. The Theory of Planned Behavior

The Theory of Planned Behaviour (TPB) [1] is an extension of the Theory of Reasoned Action (TRA) [2]. The TRA [2] proposed, as a central concept for the prediction of behaviour in any defined social situation, the intention of performing that behaviour.

The original TRA [3] postulated that intentions are the most immediate antecedents of any behaviour that is under voluntary control and are assumed to capture the motivational influences on behaviour. Fishbein [4] provided a new perspective in the conceptualisation and definition of attitude and he reported that
the main conclusion for the definition of an attitude is that, an attitude is “a learned predisposition to respond to an object or class of objects in a consistently favourable or unfavourable way” (p. 477). This definition stressed the unidimensionality of the concept and Fishbein [4] highlighted this unidimensionality as the main problem in the failure of accurate behavioural prediction as an overall attitude towards any object could be the same among individuals, while these individuals may not feel the same degree of favourableness or unfavourableness towards features of the object. Fishbein [4] further argued that this qualitative differentiation cannot be captured by unidimensional measures of attitudes and this is a reason that attitudes measured in such a way do not predict behaviour. Fishbein [4] argued that for the prediction of behaviour, it is not sufficient only to know the attitude of a person but his/her behavioural response must be known as well (e.g. intention), which are treated as different entities, subject, both of them, to the rewards and punishments of the environment which may be differentially reinforced, so that people with the same learned attitude could have different behavioural responses as a result of differential reinforcement of the last. This point was received as stressing the multidimensional composition of the attitude as, if the conative component of attitude is different, then, the attitude is different as well.

Fishbein [4] argues for a unidimensional concept of attitude, reflecting the “amount of affect for or against a psychological object” ([4] p. 478) while beliefs and behavioural intentions are viewed as separate concepts related to attitudes as antecedents of attitudes and not as part of them. This distinction is based on the actual measurement of attitudes in the literature, which reflects the measurement of affect, and the inability of a single score to accurately reflect this proposed multidimensionality. In addition, in line with an expectancy-value position, Fishbein [4] proposed that beliefs about a behaviour in terms of the value of the behaviour and the perceived probability that these outcomes are multiplied and transformed into an evaluative dimension of the behaviour, termed attitude towards the behaviour [5].

Intentions are in turn determined by attitudes towards the behaviour, a personal factor, and a social factor, subjective norms, perceived social pressures from significant referents to perform the behaviour and the actors’ motivation to comply with the referents. Attitudes and subjective norms are in turn determined by the salient beliefs people hold about the behaviour.

Attitudes are formulated by beliefs about the outcomes of performing any behaviour and the perceived importance of that outcome for the actor. So, attitudes towards any behaviour are a function of the strength that a behaviour will result in an outcome and the evaluation of that outcome. In a similar manner, subjective norms depend on views important others, in people’s lives have, and their motivation to comply with them. The TPB extends the TRA by including a third determinant of intentions and behaviour, perceived behavioural control (PBC), which is assumed to reflect past experience with the performance of the behaviour and anticipated obstacles that could inhibit behaviour. Ajzen [1] argued that any behaviour is rarely under complete volitional control and identifies, in relation to the individual, many external and internal factors that can potentially inhibit the intended execution of any behaviour. He continued that the predictive role of PBC would depend on the degree to which the behaviour is under volitional control and the potential role of external and internal factors to interfere with the behaviour. The greater the behaviour depends on these factors being enacted the greater the predictive and explanatory role of the PBC. Ajzen [1] postulated that PBC would determine behaviour both directly and indirectly. Directly through its influence to account for variations in behaviour, by taking into account possible obstacles which must be overcome for the successful performance of the behaviour. Indirectly by its influence to intentions, as any person intending to perform a behaviour takes into account the possible obstacles and whether he/she is able to effectively deal with them. Beliefs are supposed to be the single most important structural units of attitudes, norms and PBC. The contribution of each of these factors to the prediction
of behavioural intentions is relative and it depends on the behaviour under consideration or/and the person. It is possible that in certain instances either one, or a combination of these determinants will influence intentions. The degree of influence of each one of them in the prediction of intention is provided by empirically obtained standardised regression coefficients [6].

The TPB is a dispositional approach to cognitive self-regulation and provides a conceptual and methodological advance in the prediction of behaviour and the attitudes behaviour consistency [5]. According to Ajzen [7], the TPB, which deals with the information processing of the individual whose behaviour is guided by rational decisions, provides a parsimonious way of predicting intentions, which are regarded as the immediate antecedent of behaviour, by selecting attitudes, subjective norms and, recently, PBC as the mediators between several biological and environmental factors and intentions of executing the behaviour. Any other variable could have an indirect effect on intentions only by influencing attitudes, subjective norms or PBC.

Early conceptualisations and operationalisations of broad behavioural dispositions, such as traits and attitudes, failed to accurately predict behaviour [2]. In contrast to these early concepts the TRA and the TPB identify salient beliefs that operate as a function for the formation of attitudes, perceived norms and behavioural control. This feature indicates a degree of specificity for the behaviour of interest, with reference to which, the beliefs determining the constructs of the theory are operationalised. Another methodological advance is the specification of the behaviour to be predicted in terms of target, time, context and action and the corresponding operationalisation of the relevant constructs in this fashion, so that a specific and detailed matching is attained. Ajzen and Fishbein [8] argued that not all behaviours to be predicted from the constructs of the theory should be specifically defined in terms of target, time, context and action, rather, the operationalisation of both the constructs of the theory and the behaviour of interest should correspond, either in specificity or generality. The TPB provides a parsimonious framework for identifying the immediate antecedents of any behaviour with many practical advantages in terms of prediction and potential intervention. In addition, it allows for detailed and in-depth analysis of the specific beliefs that are influencing intentions and behaviour. Given that any of the determinants of intentions are found related with behavioural intentions, the beliefs underlying the related global factors can be analysed for a more detailed analysis of the beliefs underlying them so that a greater insight is gained regarding the possible determinants of behaviour at a more basic level. Any distal factors related to the behaviour of interest are supposed to have an indirect effect on the behaviour by formulating the attitudes, the perceived social norms and the PBC individuals have towards the behaviour or their weights [7].

The predictive efficiency of both the TRA and the TPB across numerous behavioural domains is evident from many meta-analytic studies [9], [10], [11]. Despite the successful performance of the theory in predicting and explaining behavioural intentions and accounting for a considerable amount of the variance in actual behaviour, there are certain issues of the theory that have been subject to criticism.

1.1. Intentions - Behavior Relationship

Ajzen [1] warns that the relationship of intentions and behaviour, with clear implications about the explanatory, predictive and practical utility of the model in several behavioural domains, is subject to boundary conditions. Given that the two constructs are measured in the same degree of specificity in terms of time, target, context and actions, the “measure of intention available to the investigator must reflect respondents’ intentions as they exist just prior to performance of the behaviour; and second the behaviour must be under volitional control” (ibid: p. 18).
The latter boundary condition was dealt with by the inclusion of PBC within the TRA [2], [1] with exactly this goal, to expand the model in such a way that with less costs in terms of parsimony to achieve a better fitness of the data to theoretical propositions and the model to be able to account for the whole range of behaviours in terms of control, thus enchanting its range of application.

The first boundary condition refers to the time interval between the measurement of control and actual behaviour, (self-report or observational). Although, as Ajzen [1] noted, the theoretical implications of the model are not challenged, when intentions at time 1 fail to predict behaviour in time 2, as the current intentions are still predictive of behaviour, this technical issue, potentially resulting in low predictive accuracy, has clear implications for the practical utility and applicability of the model. Ajzen [1] identified several factors affecting the stability of intentions over time. At the time of the measurement of the intentions a number of beliefs could be salient for the individual, yet before the performance of the behaviour other beliefs could be salient, thus reversing the proximal to the behaviour intentions. Alternatively, as the time of the execution of the behaviour approaches, habitual behavioural patterns may be more salient in comparison to stated intentions. Moreover, as the time passes from the intentions to behaviour, unanticipated and unforeseeable events may change the intentions. New information could potentially lead someone to change his/her intentions and revise his/her plan based on the new information available. Additionally, the intention behaviour relationship depends on the confidence with which the intention is held, leading to greater commitment in executing the intention. Lastly, Ajzen [1] identified self-monitoring, as a potentially moderating variable of the intention-behaviour relationship. He proposed that high self-monitoring individuals, more influenced by external factors, would be affected by new information and be prone to change their intentions, in comparison to low self-monitoring individuals who are less sensitive to external cues, being more stable over time, thus expressing stronger intention - behaviour stability.

Ajzen [1] further argued that the intention-behaviour relationship was subject to many factors, thus, at first glance, potentially undermining the practical utility of the model in many behavioural domains, unless short-term prediction is of interest. Nevertheless, he proposed that the predictive accuracy of the model could be valid for long term prediction as well, provided the prediction is at the aggregate level and not at the individual one, as the aggregate intentions are more likely to be more stable over time than the individual intentions. Ajzen [1] cited a study on family planning by Bumpass and Westoff. The time interval between the intentions and the behaviour ranged from six to ten years (the end of their reproductive periods). Ajzen [1] noted that although 41% of the initial sample asked had the number of children they intended in their completed family, on average the intended family size was equal to the actual family size achieved. The study suggested that when prediction at the aggregate level is of interest, intentions could provide a good predictor of actual behaviour, even for a long time interval, between intention and behaviour.

In a quantitative meta-analytic review of 34 studies [12], authors examined the relative stability of intentions and employee turnover. It has to be noted that not all the studies included in the meta-analysis applied the TRA, rather several models, including the TRA, proposing intentions as the immediate antecedent were analysed. This could have an effect on the relationships examined as, Ajzen and Fishbein [8], clearly specify the methodological operationalisation of the constructs, including the necessity for the measurement of intentions and behaviour at the same level of specificity. The results, however, supported the relationship between intentions and behaviour, as an average correlation of .50 between them was found. This correlation is very much comparable with the one obtained from the meta-analysis [11] from a meta-analysis of studies applying the TRA in different behavioural domains, thus enhancing the confidence in the predictive utility of intentions for behaviour, and consequently, although indirectly, in the TPB. An interesting finding of the meta-analysis was the moderating influence of time interval between
measurement of intentions and behaviour in the strength of their relationship. This finding is in accord with Ajzen [1] who argued that a decline in the relationship between intention and behaviour could be expected, depending on the time interval between the measurement of the two variables.

Randall and Wolff [10], who explored the matter further. They conducted a meta-analytic review of 98 prospective studies applying the TPB, in order to examine the relationship between time and strength of the intention-behaviour relationship. The average correlation between intention and behaviour was .45, providing support for the Ajzen’s [1] claim, that at the aggregate level intentions can be a reliable predictor of behaviour, and, although smaller, the correlation is comparable with the results of other research [12] and [11]. The variability, however, of the correlations reported in the studies was rather large, indicating potential moderating effects of other factors. Time, either as a categorical or continuous variable, did not significantly correlate with the strength of the intention-behaviour relationship, a finding that is not in accord with Steel and Ovalle [12], who argued that, the strength of the relationship between intention and behaviour was a function of the time interval between the measurement of intentions and behaviour. According to the authors, this was not expected and is contrary to the expectations of Ajzen [1] that a decline of the relationship between intention and behaviour should be expected. The results suggest that the relationship between intention and behaviour is not a function of the time interval intervening between the measurement of the two variables, thus providing support for the model’s predictive accuracy and utility for long term prediction.

Similarly the operationalisation of intention as behavioural expectation or behavioural intention did not significantly moderate the relationship between time and intention-behaviour. Marginal significant support was obtained for the role of self-report in comparison to objective measures of behaviour as a moderator of the time and intention-behaviour relationship. It seemed that when self-report measures of intention and behaviour were obtained, the relationship of intention and behaviour was more stable over time, due to “the inclination of individuals to maintain attitudinal and behavioural consistency with earlier verbalisations to which they might feel committed” [10], p. 406). The authors further noted that, as most of the studies included in the meta-analysis relied on self-report measures for the collection of data, this could have resulted in the stability of the intention-behaviour relationship over time, suggesting that the results could have actually been a methodological artifact, further warning that heavy reliance on self-report measures could potentially provide less valid results regarding the stability of the intention-behaviour relationship over time. However, it has to be noted that, the moderating effect of self-report measures on the time and intention-behaviour relationship was only marginally supported and more research is needed for the clarification of the issue.

Finally, type of behaviour emerged as the most important moderator of the time and intention-behaviour relationship. This was evident in alcohol and drug related behaviours, where the strength of the intention-behaviour relationship considerably declined over time, (r=-.67, p<.05). In the other behavioural domains this effect was not observed and the intention-behaviour relationship was stable over time. Although the authors noted that the moderating effects of type of behaviour in the strength of the intention-behaviour relationship can be viewed as tentative, since not enough studies were included in each behavioural category, it seems relevant to quote Semmer’s comment (cited in [1], p. 19), trying to explain the intention-behaviour inconsistencies over time that “[t]he conflicting behavioural tendencies produced by a goal’s attractive and repulsive features may be resolved in favour of
the more routinized responses. As the time for action approaches, people may fall back on familiar response patterns, that is, the possibility of routine responses may increase, and the probability of novel responses may decline with the passage of time. Changes of this kind could help explain the difficulty of carrying out a decision to refrain from such habitual behaviours as drinking or smoking suggesting that strongly habitual behaviours may not be adequately dealt with by the TPB, and are not controlled by the theory’s postulated antecedents of behaviour.

1.2. Perceived Behavioural Control

The TRA (Fishbein and Ajzen, [2]; Ajzen and Fishbein, [8]) was proposed to predict and explain behaviour under certain conditions. Ajzen [1] specified these conditions for the successful function of the theory. The measurement of intentions and behaviour should correspond to same level of generality in terms of time, action, target and context. Intentions should remain the same when the actual behaviour is measured and the behaviour under examination should be under volitional control. Ajzen [1] examined this last boundary condition of the TRA. He suspected that this condition restricts the wider application of the theory and/or restricts its predictive utility in many kinds of behaviour, as the behaviours that are under complete volitional control are very limited and they all fall within a continuum of controllability regarding their successful execution as suggested by Liska [5].

Liska [5] questioned the assumption of Fishbein and Ajzen [2] that most behaviour of interest to social scientists is under volitional control, and the subsequent proposition that the TRA is applicable only to volitional behaviours that require only motivation and not the availability of resources to occur, meaning that different models are needed for the prediction and explanation of voluntary and involuntary behaviours.

Liska [5] argued that this kind of dichotomy is a false one and human behaviour is best viewed as a continuum in terms of resources and social co-operation needed for their performance, and proposed that intention alone is not a sufficient determinant of most behaviours and that the resources and opportunities available to people should be incorporated within the theory. Based on these notions Ajzen, [1] proposed an expanded form of the TRA, the TPB, which includes a measure of PBC having cumulative and independent contributions in the prediction of intentions above those of the traditional constructs of attitudes and subjective norms1. The usefulness of PBC in the prediction of intentions is a function of the controllability of the behaviour.

In behaviours totally under volitional control, behavioural control was not expected to improve prediction of intentions whereas in behaviours, the execution of which depended on either internal or external factors, PBC was expected to significantly improve prediction of intentions as Ajzen [1] argues that intentions are actually potent predictors of a person’s attempt to perform the behaviour, not the actual performance of the behaviour.

Ajzen [1] proposed that PBC would depend on a set of beliefs people hold with regard to the “presence or absence of requisite resources and opportunities...so beliefs about resources and opportunities may be viewed as underlying PBC” (p. 475). He proposed two versions of the TPB. In the first version PBC, in addition to attitudes and subjective norms, has a motivational effect on behavioural intentions which mediate any effects of behavioural control on behaviour.

The second version of the Theory proposes the possibility of a direct effect of PBC on behaviour in addition to the effect of intentions on behaviour. This version is based on the assumption that performance of any behaviour is not solely based on motivation but on actual control over the behaviour. To the extent that PBC reflects actual control, the successful performance of any behaviour is likely to depend on
actual control over factors influencing the execution of the behaviour independently of the effects of motivational factors reflected by behavioural intentions.

Ajzen and Madden [13] tested the TPB in an attempt to predict class attendance. The results were consistent with the theory, PBC significantly enhanced the prediction of intentions over the contributions of attitudes and subjective norms and continued to make a significant contribution to the prediction of intentions after the influence of past behaviour was taken into account, while no interaction effects were observed. At the same time, behavioural control did not have any effect on the prediction of actual behaviour, as attendance of class is thought to be under volitional control and at the same time the second version of the theory, postulating a link of PBC with actual behaviour, was not supported.

In addition, no interaction effects of intentions and control were observed. In the same study the authors report results with respect to prediction of intentions and attainment of a grade “A”. The results are consistent with the results obtained for the prediction of class attainment with regard to the contribution of behavioural control in the prediction of intentions, yet attitudes were the only other significant predictor of intentions, subjective norms failed to account for any variance in intentions. An interesting finding was that PBC predicted actual attainment of grade “A” independently of intentions, even after past grade attainment was taken into account. This finding supported the second version of the theory and the Ajzen’s [1] reasoning that a direct link of PBC and behaviour is expected to the degree that the behaviour is not completely under volitional control and perceived control reflects actual control over the execution of behaviour. Yet, contrary to expectations of an interaction of intentions with PBC on behaviour, and control with attitudes and subjective norms on intentions, no interaction emerged.

Giles and Gairns [14] in a study of blood donation, applying the TPB, provided further support for the role of PBC in the prediction of intentions of donating blood. The variance of intentions predicted increased (R= .27), from the addition of PBC in the regression equation. Consistent with the results of Ajzen and Madden [13] no interactions emerged from the data “suggesting that the effect of control adds to the prediction of intentions in a linear additive fashion” (Giles and Garnes, [14] p. 179). The results did not reveal any direct effect of control on the prediction of actual blood donation, with the most potent predictor of actual behaviour being intentions to donate blood.

Godin and Kok [15] reviewed the application of the TPB in health related behaviours in fifty-six studies, in an attempt to evaluate its explanatory and predictive efficiency. They report that on average 40.9% of intentions’ variance was explained by the constructs of the theory, ranging from 32% to 46.8% and 34% of the variance of behaviour was predicted by the combined contribution of intention and perceived behavioural control.

PBC made a significant and independent contribution to the proportion of the variance of intentions, at 13.1% on average, supporting the predictive and explanatory function of PBC. Intentions emerged as the most potent predictor of behaviour, while behavioural control made an independent contribution in the prediction of behaviour in approximately half of the behavioural applications studied, on average 11.5% of the behavioural variance explained. This is consistent with the theory as the role of behavioural control in the prediction of behaviour varies according to the actual controllability of the behaviour, evident from the inspection of the addictive behaviours reviewed in the study, where perceived control explained almost 20% of the behavioural variance, carrying more weight in comparison to intentions. Overall, the meta-analytic study supported the theory, indicating the necessity of the inclusion and the measurement of PBC in the prediction of behavioural intentions and actual behaviour, although the relative contribution of each construct needs to be verified empirically for each behavioural domain, which is consistent with the theory, as a considerable variability in the associations between the constructs that emerged from the data was observed.
DeVellis, Blalock and Sandler [16] in a prospective study of cancer screening found that perceived control increased the amount of variance predicted in intentions to participate in screening for both high and average risk individuals matched on several demographic characteristics. Yet, perceived control had a direct effect on the prediction of actual behaviour but only for the high-risk sample, although the model was more efficient in predicting actual behaviour in the average risk group in comparison to the high-risk group. The authors concluded that PBC exerts its motivational influence through intentions, thus enhancing the predictive and explanatory accuracy of the TRA.

In contrast with the results reported by the previous researchers, Kelly and Breinlinger [17] found that, in a study predicting women’s participation in collective action, PBC, although significantly, yet weakly, correlated with intentions and behaviour did not change the R values when added in the prediction equations. Consistent with findings from the studies mentioned above no interactions of control with the other constructs were observed in the prediction of either intentions or behaviour. They conclude that the constructs postulated by the TRA were efficient in predicting women’s intentions to participate in collective action and actual participation. The results suggest that the behaviour of interest is highly under volitional control, stressing the need to empirically access and determine the relevant constructs for each behaviour. An interesting finding of the study was the moderating effect of self-concept as an activist. It was found that the TRA performed better in those describing themselves as weak identifiers and not at the group of strong activists. They suggest that individual cost and benefit calculations are less important when social identity is salient, further proposing the inclusion of individual characteristics, as important moderators, in the theoretical model.

Beale and Manstead [18] applied the TPB in an attempt to predict mothers’ intentions to limit the frequency of their infants’ sugar intake. Although the theory’s constructs only moderately predicted intentions, PBC had a significant and independent contribution in the prediction of intentions, yet of a moderate degree. In line with the theoretical propositions of Ajzen [1] PBC had a significant effect on intentions only for mothers with older children, indicating that personal experience with the behaviour plays a role in the recognition of the control factors involved in the execution of the behaviour, thus making it a significant predictor for behavioural intentions. It is worth noting that for mothers with older children, perceived control carried more weight in the prediction of intentions than attitudes, demonstrating the importance that direct experience with the behaviour can have on the formation of perceived control and subsequently, intentions.

In line with the results of Beale and Manstead [18], Babro, Black and Tiffany [19] in a study about intentions to participate in a smoking cessation programme, found that although intentions were a positive function of attitudes, subjective norms and PBC the last determinant contributed less than the other two in the prediction of intentions, although independently and significantly. The results support the addition of perceived control to the traditional constructs of the TRA yet to a moderate degree. East [20] reported similar results in three studies about investment intentions. Perceived control made a significant and independent contribution to the prediction of intentions beyond and above of attitudes and subjective norms. The results indicate the usefulness of perceived control in the prediction of intentions, however they support the first version of the theory as no direct link was observed between perceived control and actual behaviour. Rather, the effect of control on behaviour, was fully mediated by intentions, supporting the motivational role of control to behaviour, in the case of investment decisions.

intentions of condom use, Schifter and Ajzen [27] in predicting weight loss. Madden, Ellen and Ajzen [28] reported that the TPB is superior to the TRA in predicting and understanding behaviour after directly testing the two theories in ten different behaviours. They, nevertheless, noted that the effects of PBC were more evident when the behaviours presented some difficulties of implementation due to control.

1.2.1 Factors Moderating the Relationship of Perceived Behavioural Control with Intentions and Behaviour

The aforementioned studies suggest a variability of results regarding the function of PBC within the theoretical model proposed by Ajzen [1]. The results are not inconsistent with the theoretical propositions, apart from the interaction effects between intentions and control to account for variation in actual behaviour which is not supported empirically. Yet, the variability observed in the performance of PBC as a determinant of intentions and action, suggests that certain factors serve as moderators of the relationships postulated by the theory. Although Ajzen [29] suggests that the search for moderators for any model can actually extend to a limitless list making the effort cumbersome and in the end fail to make much contribution and meaning, certain predictive and practical reasons for some kinds of behaviours apparently make the search for a limited number of potent moderators for any model worth pursuing.

Based on that assumption, Notani [30] conducted a quantitative meta-analytic review of the studies employing the TPB, with the aim of identifying factors that moderate the relationship of PBC with intentions and behaviour and to assess the efficiency of the theory to account for factors determining and predicting intentions and behaviour. As the robustness of the TRA, which according to Ajzen [1] can be regarded as a special case of the TPB applicable to behavioural domains under volitional control, has been assessed in the widely cited review of Sheppard, Hartwick and Warshaw [11] concluding that the model performed well in the prediction of intentions and behaviour, the author limited the studies to be included in the meta-analysis only to application of the expanded model, that is, the TPB.

Notani [30] notes, that both contextual factors and conceptualisation and operationalisation of PBC varied considerably. He recognises that perceived control provides a useful additional construct in the prediction of intentions and behaviour, yet he notes that its role differs in each case. Perceived control is a motivational factor in the prediction of intentions in addition to attitudes and subjective norms, something established empirically, however, to function as a predictor and determinant of action it needs, to an extent, to reflect real control over the behaviour. When it does not predict behaviour, the author continues, we cannot readily conclude that the behaviour is under complete volitional control. An alternative explanation could be that unrealistic perceptions of control have been formulated and the role of control has not been revealed. He attributes the consistency observed in the literature between perceived control and intention and the inconsistency between perceived control and behaviour to that difference, although noticing that overall the link between perceived control and behaviour was supported, yet in a weaker way than the link between perceived control and intention. He continues arguing that under circumstances where the perceptions of control can be more accurate, the link between control and behaviour will be stronger.

Global measures of control were found to predict behaviour in contrast to belief-based measures. This finding was not in accord with the expectation that belief-based measures could be better predictors of behaviour as they provide a more detailed account of the factors involved in the successful execution of the behaviour. Notani [30] suggests that the more evaluative nature of global measures, as opposed to the more cognitive nature of belief-based measures, could account for that finding.
as behaviour is often affectively driven. He also notes the possibility that the control beliefs represent a biased sample of beliefs or an incorrect one. He concludes that when prediction of behaviour is the main purpose global measures of control are sufficient, whereas when the determinants of control that structure PBC are sought, a belief based measure of control can be useful, after careful pilot testing and pre-testing.

While PBC predicts intention, when conceptualised and operationalised either as reflecting internal or external factors of control, the link between control and behaviour is better supported when perceived control reflects mainly internal to the individual factors, factors for which the individual can have more accurate perceptions and estimations.

Notani [30] continues that for student populations perceived control was a significant predictor of intentions but not for behaviour. On the other hand for non-student, adult populations, perceived control was a significant predictor for behaviour but not for intentions. Younger, inexperienced and with less self-knowledge as students can be, their perceptions of control reflect an inaccuracy of estimation for the control factors involved in the attainment of a behaviour. The reverse can be said about an older, experienced, adult population, with better self-knowledge, better able to accurately identify and take into account control factors intervening with the attainment of any behaviour.

In the same line, Notani [30] argues that an important moderator in the relationship between control and intention and control and behaviour can be the familiarity of the behaviour of interest. It was found that PBC was a significant predictor of behaviour when the behaviour under consideration was a familiar one as “a person is likely to have more information on past behaviour, thereby providing a good measure of actual ability and, in turn, serving as a good predictor of the behaviour” (ibid: 266). The motivational influences of control on intentions were evident for familiar behaviours as well, something that was not observed for unfamiliar behaviours. Unfamiliarity with a behaviour does not guarantee an interest in the behaviour or can produce anxiety, leading to “a stronger motivation to engage in familiar behaviours compared to unfamiliar ones” (ibid: 266).

Conclusion

This paper illustrated that in terms of explanatory value, predictive accuracy and practical utility of the model is significant when and under which conditions the intention-behaviour relationship demonstrates stability. In the same line an issue further discussed is about the moderators of the relationship of PBC with intention and behaviour, again with implications about the explanatory value, the predictive accuracy and the practical utility of the model.

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