



# Psychological and Behavioural Science

## *Multi-level Marketing*

**Nicholas Chan**

**Sophia Freckmann**

**Imogen Lester**

**Fiona McCully**

**London School of Economics and Political Science**

**PB403 Psychology of Economic Life Summative coursework  
May 2022**

**Course convenors: Dr. Fred Basso & Prof. Saadi Lahlou  
Other teachers: Dr. Maxi Heitmayer**

## Acknowledgements

We thank Cambridge Social Decision-Making Lab; <https://www.sdmlab.psychol.cam.ac.uk> & DROG Company; <https://drog.group>; for advice and access to Radicalise game’s backend for development of our game mock-up in Appendix B & C; Alternative game-play scenario presented in Appendix B.

## Table of Contents

Background: Historical and Cultural Context.....	
Introduction.....	
Problem Analysis.....	
Theoretical Framework of Analysis.....	
Activity Theory.....	
Social Regulations.....	
Physical Affordances.....	
Embodied Competence.....	
Intervention 1: Inoculation Theory.....	
Intervention 2: Social Media Campaign.....	
Intervention 3: AI and Banking Alerts.....	
Limitations.....	
Conclusion.....	
References.....	
Appendices.....	

## BACKGROUND

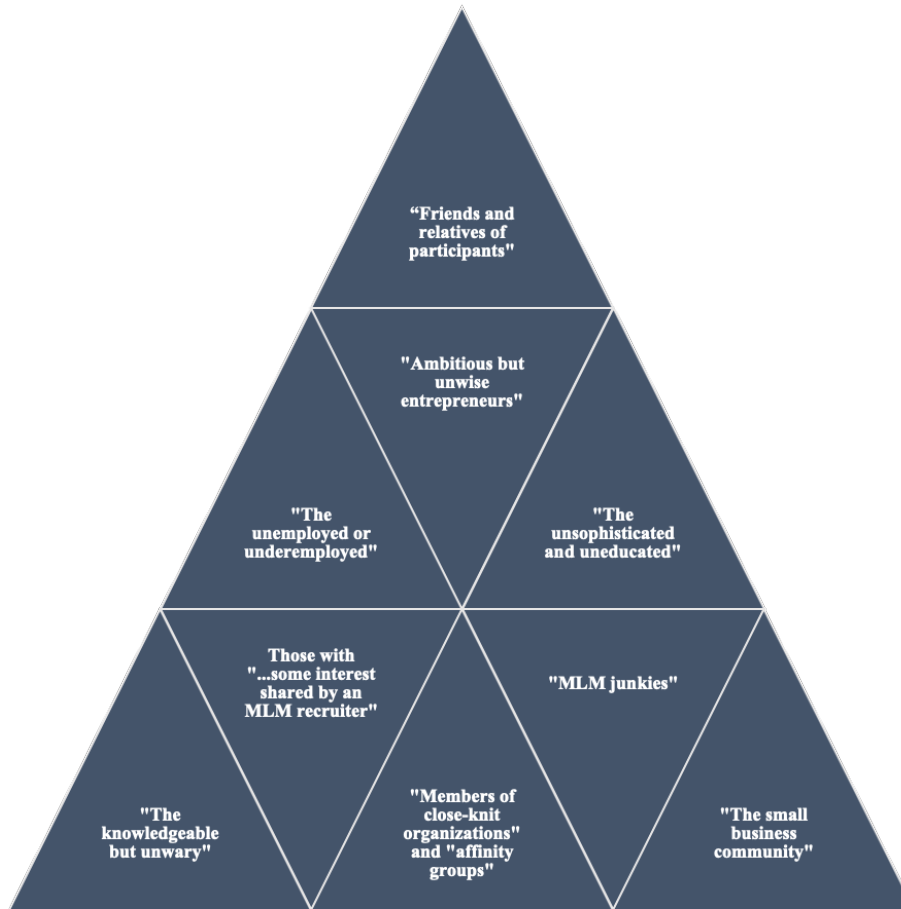


Figure 1: Breakdown of the types of 'victims' which MLMs target (Taylor, 2011, CH. 9, p. 5-7)

MLM schemes are a business format encouraging members to market the company's products to their personal networks (Emek et al., 2011). Distinct from traditional forms of retail, MLMs particularly emphasise recruitment of direct sellers. Incumbent participants are strongly encouraged to refer as many new recruits as they can, creating an *upline* and *downline* hierarchical relationship between the recruiter (upline) and the recruited (downline; Pang & Monterola, 2017, p. 101; Nat & Keep, 2002). The MLM industry was worth approximately \$40.1 billion (USD) during 2020, which was around 43% larger than its market capitalization a decade earlier (DSA, 2022). Furthermore, the DSA (2022) stated that 75% of all MLM participants are female. Today, given digitalisation's ubiquity, the MLM industry has access to new online avenues for expansion.

However, a plethora of ethical issues arise. The introduction of MLMs saw a surge of illegal activity from *Pyramid Schemes* (PSs; Nat & Keep, 2002). Despite PSs being explicitly outlawed, the two forms

of organisation still have similar outcomes for their members (Pang & Moneterola, 2017). Defined, PSs are an illegal scam that intentionally exploits the *referral* feature as a means of revenue generation (FTC, 2021). In doing so, they look to gather participants in mass via creating extravagant monetary promises (FTC, 2021), fraudulently luring unknowing entrants into paying for excessive starting inventories and recruiting licences while the selling of the actual product is largely irrelevant (Nat & Keep, 2002). Both MLMs and PSs adopt similar methods of revenue generation: from selling actual products and receiving referral bonuses from new downline members.

The minimum capital spend required for MLM participants to offer even a small probability of success begins at \$25,000 per annum - operating expenses include stocking products, technology, advertising, and travel (Taylor, 2011, p. 78). These expenses are typically difficult to recuperate, and in many cases can lead to debt, both to the participant and their associated social networks (Taylor, 2011, p.8). Alarmingly, 99% of all MLM participants globally fail to generate a single cent of profit (Taylor, 2011; Albrecht & Filip, 2021, p. 2).

Through situating the prevalence of *Multi-Level Marketing* (MLM)s within a broader historical context, we develop a more nuanced understanding of their insidious nature. Although now spreading globally, MLMs primarily originated in post-WWII U.S. when suburban life was becoming increasingly common and working middle-class women were spending more time in “consumer institutions” (D’Antonio, 2018, p. 2). This era saw an exponential increase in consumer culture as the growing middle-class used their purchases as signals of their social status, transforming objects, such as cars, washing machines, and cosmetics, into *socially meaningful objects* (D’Antonio, 2018). Yet, the isolating nature of the suburban nuclear family and trivialization of women’s labour and devaluation of their earnings left women with minimal social mobility, seeking new forms of self-expression and recognition within the conservative, stereotypical feminine identity (Bax, 2010). To this, early MLMs offered the perfect solution. Companies like *Tupperware* or *Mary Kay* encouraged women to purchase inventories using their husband’s income and host *selling parties* where they could gather in an intimate setting to mingle and make some cash through selling these socially meaningful objects to their pre-existing community networks (D’Antonio, 2018). Critically, these MLMs gave women a unique opportunity to receive public recognition for their labour, through prizes like Mary Kay’s famous *pink Cadillac* gifted to top sellers (Winter, 2021).

MLMs customarily claimed that sales work would be flexible, part-time, positive and fun, and not interfere with women’s domestic duties. Unlike, for instance, the classic door-to-door salesman lifestyle which often required many days away from home (Winter, 2021). Such sales work enabled women to tap into their (presumed) innate ability to “emotionally multitask” and monetize this distinctly feminised

work (D'Antonio, 2018, p. 6). In doing so, MLMs allowed women to rewrite the *narrative of womanhood*, in line with the growing wave of consumerism. Coupled with a faux-feminist rhetoric of female empowerment, MLMs' messaging epitomized the *American Dream*. With drive and effort, these women were taught that they could change their own lives for the better. This line of thinking relied on the neoliberal principle that "the actions of the autonomous individual agent are the only causal factor in determining the economic or social outcomes the individual achieves or experiences" (Wrenn & Waller, 2021, p. 428). This pretence led women to craft a narrative of direct-selling as both an identity and lifestyle. Such improvements to their quality of life afforded by MLMs were most often defined in status and material terms. Extra cash earned from sales work would let them buy *that* dress they wanted and signal their self-earned status to their peers. MLMs actively encouraged such conspicuous consumption to attract more sellers to the (proclaimed to be) *life-changing* opportunity. The advent of social media has only exacerbated MLMs' inclination to promote conspicuous lifestyles for sellers. *Figure 1* shows the breakdown of common individual types that make up a modern MLM.

## INTRODUCTION

Given the parallels in both structure and activity between MLMs and pyramid schemes, regulatory bodies have amended policies regarding MLMs' operation. However, modern legal regulations have inadequately prevented fraudulent activity (Nat & Keep, 2002). Albrecht and Filip (2021) agree that current MLM legislation empowers scam-like activity as the specificity of the law allows MLMs which act unethically to build the rhetoric of acting lawfully, bypassing legal axioms. Following MLMs' meteoric rise, they continue to evolve in order to reflect values of younger generations. It is important to establish a means of educating individuals to discern whether an MLM can be considered legitimate or not. Moreover, it is crucial to foster social awareness of the risks, costs, and externalities associated with joining these companies.

## PROBLEM ANALYSIS

### *Theoretical Framework of Analysis*

To comprehend the outcomes for individuals exposed to MLMs via social media recruitment, we must break down the systems in place to identify the point at which intervention is most appropriate. *Installation Theory* (IT; Lahlou, 2018) provides tools to examine this behaviour, stipulating that individuals navigate their environment through three simultaneous layers: *physical affordances* (PAs), *embodied competences* (ECs), and *social institutions* (SIs). PAs deal with material objects and

settings which surround us and dictate how we are able to (and should) physically interact with our environment. ECs deal with individuals' psychology and personal skill set which may be innate or learned which further permit particular engagement with one's surroundings. Lastly, SIs relate to formal and informal rules directing behaviour, stemming from social relationships and institutions within the social sphere (Lahlou, 2018). We will utilise IT to understand young adult female-identifying individuals' activity on social media when exposed to MLM recruitment. IT will be included in the following analysis using Activity Theory.

### *Activity Theory*

Through mapping individuals' step-by-step *journey* into MLMs on social media, we can identify potential points of intervention. *Activity Theory*, as abstracted by Lahou (2018), enables us to chronologically visualise the emergent goals and subsequent actions of the individual. We also build a framework - through superimposing our summary findings from our installation analysis - for assessing how the individual is channelled throughout their escalation of commitment trajectory. We can observe how an individual may identify joining an MLM as an appropriate medium for attaining higher-order goals, such as self empowerment. We can also observe how this goal is redefined upon joining an MLM to integrate selling into the individual's personal narrative. We have chosen to focus on the initial MLM engagement as we believe individuals are most susceptible to intervention during earlier stages entailing lower levels of commitment.

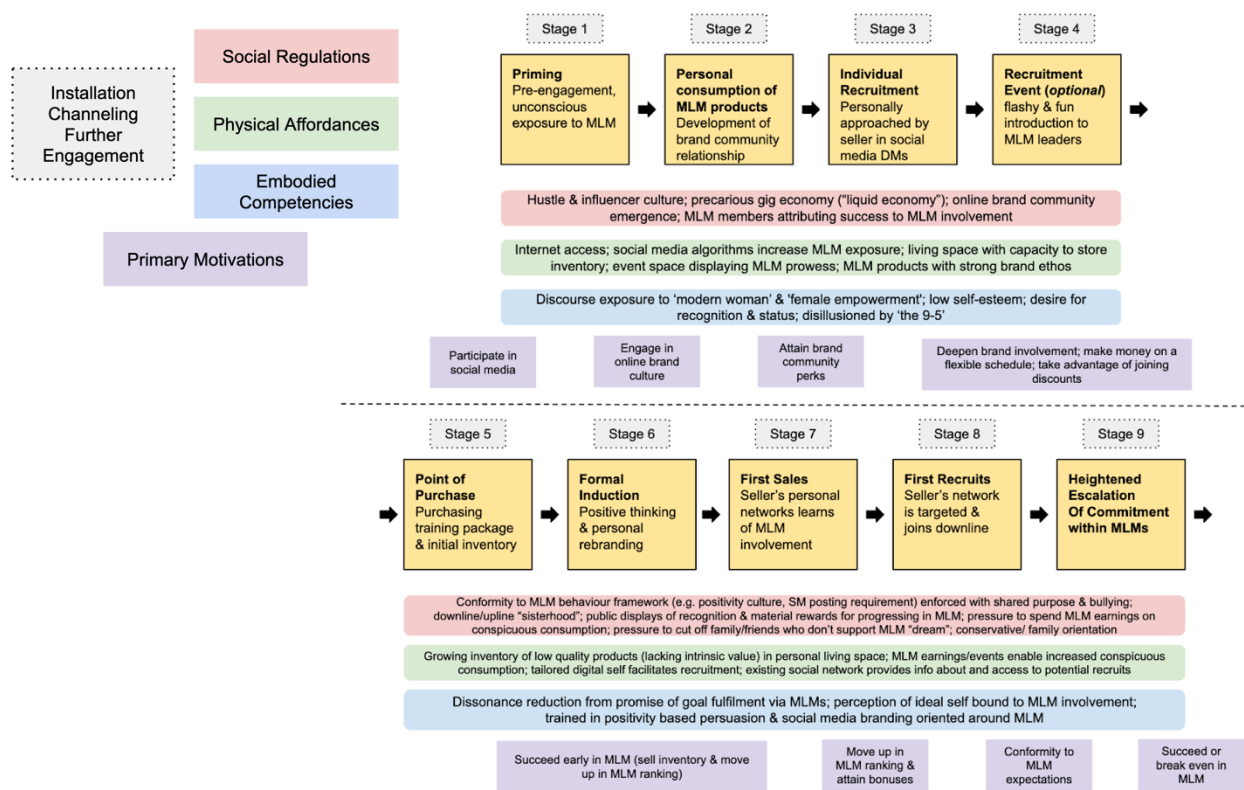


Figure 2: Mapping Escalation of Commitment in MLMs

### 1. Social Regulation

This layer includes: the culture both within MLMs and the online space they operate in, and the social dynamics between recruits and recruiters.

#### Online Brand Community

Online social networks play a major role in brand formation and growth, as individuals virtually gather in different sub-groups with a specific brand at their centre (Woisetschlager, Hartleb, & Blut, 2008). Granovetter's (1985) *Social Network Theory* describes our behaviour as fixed into *networks* based on interpersonal relations. In the *Internet Age*, these can exist virtually enabling communication, connection, sharing and discussion of ideas (Raacke & Bonds-Raacke, 2008). Such networks can also serve as *virtual communities of consumption* fostering high consumer knowledge and companionship in order to influence purchasing behaviour (de Valck et al., 2009). MLMs utilise brands' existing institutional and social regulations as camouflage in order to grow in both followings and finances. Western consumer culture has given rise to brand communities that bind community and brand together (Zaglia, 2013). Brand communities are unique to other communities due to their commercial character and their followers' joint interest and enthusiasm in a brand (Albert, Merunka & Valette-Florence,

2008). There are three community markers at the core of online brand communities that explain how outsiders are drawn in (Muniz & O'Guinn, 2001). The first is one's perceived membership within the group that dictates their social identity: who sits within and outside the group (Bagozzi & Dholakia, 2006). MLM members signal this belonging with active social media usage during company events and product placements in their candid, "non-business" social media posts. This is highly visible on social media for their non-member peers who may become enticed by the glamour of such life-style and attribute their apparent newfound success to MLM membership. The second marker is shared rituals or traditions, common sets of values, behaviours, and specific forms of language used by those within the community (Casalo et al., 2008). MLMs have frequent product launches and holiday discounts which lead to a frenzy of online buying and selling activity as members are overloaded with inventory. To the outsider this may appear like a thrilling cash grab. Moreover, MLMs have strong "positivity" and "girl-boss" narratives, which can be superficially appealing as an accessible way of self-improvement. They have an abundance of highly publicised recognition opportunities and MLM members are known to take on animated language in online spaces to foster engagement, notably heavy use of emojis and interactive features. The final marker utilises the moral responsibility that affects community members to feel morally obligated to other members and the community itself (Casalo et al., 2008). This responsibility can be reflected in individuals supporting others' use of the brand as well as enticing new members into the community (Muniz & O'Guinn, 2001). MLM's business model is dependent on members building "downlines" of sellers, which we have already established as fundamentally unsustainable. This is often portrayed as an "MLM family" to deliberately foster notions of loyalty and devotion while offering new members leadership opportunities and mentorship. To the unsuspecting eye, MLMs can be indistinguishable to other brands which also have these kinds of communities. In turn, they feel a moral responsibility to the brand in "spreading the word" to others, thus leading to stronger levels of commitment, affiliation, and reciprocity.

#### *Social Relations: Manipulation and Predatory Recruitment*

Cialdini (1984) identified five principles that can be used in persuasion: *reciprocity*, *scarcity*, *authority*, *liking*, and *consensus* (p. 207). The first (reciprocity) refers to how people have an obligation to others when they have received something from them first. In this context, a recruit may feel that they are indebted to the recruiter for choosing them and dedicating their efforts towards recruiting them (e.g., time and sometimes material gifts/incentives). Scarcity entails that people desire more of something when there's less of it and this is capitalised on by recruiters when they make *limited time offers* or *exclusive sign-up opportunities*. Furthermore, potential recruits are made to feel special through complimentary language suggesting they are uniquely *perfect for the role*. What is important here is not only the benefits claimed to be gained from signing-up, but also the framing of potential losses if the opportunity is not seized. Authority entails that people follow individuals with (assumed) knowledge and credible expertise in a certain domain. In this context, success stories of founders/CEOs are



presented to recruits by the recruiter and they claim to offer the chance to be mentored by such individuals following sign-up. Liking states that we are drawn to those who resemble ourselves in some form due to the fact that we tend to like *those who are similar to us, who pay us compliments, and who cooperate with us to achieve shared goals*. Consensus proposes that during uncertainty, individuals observe how others act for guidance. D'Antonio (2019) noted an early method of recruitment for MLMs such as *Tupperware* was by hosting *selling parties* in one's home with friends to demonstrate the product and business. The collective experience played an important role in how invitees understood the product and influenced them to join the MLM as they were able to observe the group's approval of the company and products. *(A literature review of specific tactics used in predatory MLM recruitment is shown in Appendix A)*

### **1. Physical Affordances**

This layer includes tangible artefacts found within the *material* environment of an MLM. PAs are leveraged with the two other IT layers to inform and support MLMs' corporate activities.

#### *Digital Resources*

Modern MLMs utilise digital resources to spread their communications and values across networks. These efforts are particularly responded to when outreach targets certain demographics. To foster rapport with younger generations that idolise community-based influencers, virtual affordances such as Instagram, Facebook, and Pinterest are considered gateways to the future of MLM marketing (Rusli & Ibrahim, 2021). Within digital environments, *mediating structures* exist to facilitate information processing (Lahlou, 2018, p. 73). These form social platforms' online interface, enabling direct messaging between potential recruits and recruiters and the posting functions that expedite the broadcasting of information to targets.

#### *Inventory Stockpiles*

"Affordances account for how subjects perceive the pragmatic potential of their environment" (Lahlou, 2018, p. 53), for example, MLMs and their recruiters possess PAs of inventory stockpiles as *potential* to facilitate commercial transactions. However, closer examination reveals the substantive role that the inventory itself plays in motivating individuals to sell the product within their network, especially if its perceived quality qualifies as a socially-meaningful object (D'Antonio, 2018). The physical presence of this stock may promote perceptions of *sunk cost*, where individuals are reminded of the time, effort and money they have spent on inventory, further motivating their desire to sell. Online mediating structures then grant the potential for marketing of such inventory and propagating the desirability of it amongst consumers. Despite this, inventory stockpiles typically hold little or no real market value (Coughlan, 2012, p. 6), which introduces how information asymmetry is characteristic of MLMs.

### ***1. Embodied Competencies***

The ECs layer includes: individuals' life motivations (which are preyed upon through manipulative appeals in recruitment pitches) and their susceptibility to persuasion (hindered via deliberate provision of asymmetric information between potential recruit and recruiter/MLM as a company):

#### *Individual Motives*

Recruitment of new members into an MLM most often occurs at a vulnerable time in a person's life, such as: when moving to a new place, graduating from an institution, being unemployed, suffering financial debt, alongside other situations which are likely to induce loneliness and purpose-seeking. The individual is in the process of constructing their own narrative to form a new identity for themselves (D'Antonio, 2019).

Emotional strain is experienced given the incongruence between how they currently perceive themselves and what they aspire to or feel they should be to meet social expectations, this is proposed by *Self-Discrepancy Theory* (Higgins, 1987). Self-belief contains two parts: *domains of self* and *standpoints of self*. The former refers to *actual* (qualities believe they currently possess), *ideal* (attributes they desire to possess) and *should* selves (qualities feel they should embody given personal responsibilities or moral obligations). The latter part of self-belief refers to viewpoints from which one is evaluated either from their own standpoint or that of others. The gap between these two domains of self is what is known as a *discrepancy* and can result in emotional strain and vulnerabilities (Higgins, 1987). Specifically, individuals may experience more negative affect and loneliness when they are further from the self that they wish to be (Barnett et al., 2017). This negative emotional state may create an urge to meet the ideal and ought selves, making the individual open to opportunities that help achieve the desired self. As the mind of the individual endures cognitive strain through this discrepancy gap, the resulting emotional strain leaves little room for other cognitive processing. An already taxed mind may resort to using System 1 (automatic) processing over (analytical) System 2 processing, making one more prone to judgement errors (Kahnman, 2011). Thus, despite the individual potentially being conscious of red-flags in the recruitment pitch, their desire to reach the ideal self (in both their view and others'), negative emotional state and friendliness from the recruiter amalgamate to diminish their agency exertion during persuasive recruitment attempts.

#### *Psychological Vulnerability to Persuasion*

The power of persuasion is reflected in the manipulative recruitment tactics and branding used by MLMs. They appeal to individuals' desire for ease through offering the promise of quick cash and a flexible working schedule while emphasising big rewards and lavish lifestyles led by most 'successful'

current sellers. The value of the product itself is often oversold to recruits too, making these items seem life-changing and thus increasing the appeal of investing in their stock to later sell. The exclusive nature of being in the MLM is also utilised as a persuasive tool, where company conventions, selling parties, potential for more social media followers and online clout are all used to lure recruits in and make them feel special and chosen. MLMs may also encourage peer pressure if the individual's friends, family, neighbours and/or local community are already involved in the MLM (which is particularly likely given how demographic-based targeting is often used). The companies also claim to fulfil members' higher sense of purpose and offer them a desirable identity. For example, through offering scope for self-transformation and personal re-branding. Further higher-order needs referenced by MLMs are those of community and validation, namely through promising new friendships and connections, an affirmed social media presence and entrance into an empowering *sisterhood*. Lower-order needs that are presented as fulfillable upon entry to the MLM are that for extra income and cash, alongside the chance to access the (supposedly) groundbreakingly effective products before anyone else.

### *Asymmetric Information*

The true difficulty (and impossibility of everyone who is recruited) achieving this level of income, given the nature of the MLM business structure, is deliberately masked thus promoting asymmetric information between recruit and recruiter. Products sold by (often referred to under the title) *consultants* offer marginal or non-existent opportunities to profit and preying on others through getting them recruited into one's *downline* is the more lucrative endeavour. Misrepresentation of profitability and earning potential by MLMs often occurs through three main methods:

1. Calculations of success *odds* exclude the total of enrolled distributors and only include active sellers at that time, which are "compared against the cumulative number of top distributors who have achieved certain levels over a long period."
2. Net earnings calculations do not subtract costs
3. Buyers assume products "sold at inflated retail prices, which seldom happens." (Taylor, 2006, p. 18)

### **INTERVENTION 1: *Psychological Inoculation***

The first intervention proposed in our *de-escalation of commitment strategy* is implemented at the pre-engagement stage of MLM recruitment and aims to simultaneously bolster psychological resistance to persuasion and redirect individual motives (for joining an MLM) to more sustainable, legitimate sources of fulfilment. The intention here is for the aforementioned embodied competencies to be enhanced so that more critical thinking and active agency can be exerted when encountering recruitment attempts, preventing any escalation of commitment to the MLM. We propose an interactive online *inoculation*

*game* to improve resistance to persuasion which also includes education and information designed to foster accessibility to alternative, genuinely motivation-fulfilling opportunities.

### ***Theoretical and Empirical Underpinnings***

It is integral that in any fraud prevention intervention, education into warning signs is delivered alongside insight into persuasion tactics, social network exploitation and administration of cognitive strategies to foster rational choice-making (Cialdini 2001; in Bosley & McKeage, 2015). Hence, our inoculation game aims to address all three of these areas.

#### *Inoculation Theory*

Psychological inoculation stems from the vaccination mechanism in medicine, where a vaccine is made of a weakened or dead pathogen containing antigens which trigger antibody creation by tricking the body into thinking it is being infected, resulting in antibodies being made so that if the person comes into contact with the active pathogen later on the necessary antibodies are ready. This was first applied psychologically by McGuire (1961) while attempting to stop U.S. soldiers being persuaded by foreign propaganda while fighting abroad during the Cold War. He found participants who received a warning (*threatening defence*) that their beliefs were under attack prior to being told false information, were better able to preserve pre-existing beliefs. This served to *inoculate* pre-held beliefs and prevent persuasion to misinformation. Pfau et al. (2005) found such inoculation strengthens associative brain networks by increasing the number of nodes and their linkages, further promoting resistance to counter-attitudinal persuasion attempts. It has now been found that inoculation interventions need to be both *active* (where participants deliberately engage with them; Roozenbeek & van der Linden, 2019) and *technique-based* (targeting specific tactics used in the manipulation; Cook et al., 2017).

#### *Gamification of Fraud/Scam Prevention*

The use of games for fraud/scam education has been used both experimentally and commercially. For example, Natwest (2021) include a *Scambusters* interactive game on their website the FINRA Foundation (2022; an organisation assisting procurement of financial stability for Americans) feature the game *Con'Em if you can* alongside educational YouTube videos corresponding to each scam warning sign. Empirically, Sheng et al. (2007) tested an online game (*Anti-Phishing Phil*) teaching habits to prevent phishing attacks and found participants' accuracy identifying fraudulent web-pages improved following game-play. Saleh et al. (2021)'s pre-registered study created *Radicalise*, a game attempting to *inoculate* against extremist recruitment by exposing players to "...severely weakened doses of the key techniques and methods used to recruit and radicalise individuals via social media platforms" (p. 1). Post-game play, they found participants were more able and confident correctly identifying manipulative recruitment appeals and traits which make people susceptible to targeting.

## Intervention Enactment

### Target Audience

We have chosen to target current young female-identifying consumers of MLM products, as these individuals are likely to be frequent Instagram users, already versed in consumer and social media culture, and also highly targetable by MLM recruiters given their initial engagement with the companies through purchases. The game will be administered to this demographic via *Instagram Feed* advertisements, funded by relevant NGOs and/or government departments (e.g., here we have chosen the U.K.'s *Department for Communities and Local Government*). However, the Instagram algorithm will only include such advertisements on an individual's feed if they are *engaging* (i.e., browsing and/or interacting with content) with current MLM brands' pages or sellers' accounts. (see *Appendices B & C for game trajectory visualisations and D for game progression sequence*)

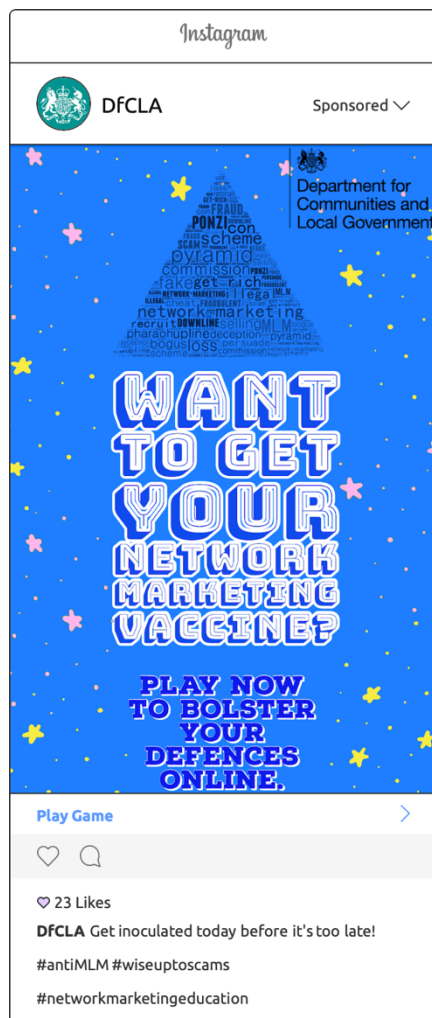


Figure 3: Example of Instagram advertisement

### *Post-Play*

After completing the game, players will be warned of the harmful nature of MLMs (thus ensuring it is clear that the game does not promote personal adoption of manipulative recruitment efforts) and shown brief summaries and explanations of each of the four tactics (*badges earned*). The campaign will share a *Linktree* where individuals input their postcode to access recommended alternative community resources capturing five goals that frequently motivate MLM involvement: higher/new income stream, social belonging, finding purpose in the community, obtaining new skills, and independence-seeking (see Appendix E for examples).

The final page of the game will also re-direct individuals to *life post-MLM* testimonials and/or online forums offering support for those debating entrance into an MLM. For example, Facebook pages such as: *@AntiMultiLevelMarketing* and *The Anti-MLM Coalition (@AntiMLMwriters)*. Trusted organisations providing more detailed information (such as *Scam Watch* or *Action Fraud*) will also be cited on the page. After this, players will receive the option to download their *MLM Inoculation Training Certificate* which can be shared via social media to further signal commitment to resisting MLM recruitment attempts and contribute to changing norm perceptions of their demographic's involvement in these schemes.

## **INTERVENTION 2: *Social Media Campaign***

This intervention seeks to disrupt the progression from Stage 1 (early priming) to Stage 5 (point of purchase) which mainly takes place within online social spaces. It attempts to evoke scepticism towards MLM brand communities and slow their diffusion into local communities through a social media campaign that will “disrupt the feed” of the flashy and exclusively positive ‘girl-boss’ MLM content. When an individual positively interacts with such MLM content online (regardless of their initial intent to join) they further the MLM's mission. From the members' side, the amount of likes they receive indicates social approval (Ozanne, Navas, Mattila, & Van Hoof, 2017), encouraging the poster's change in behaviour, deepening their engagement with the MLM. From the non-MLM individual's position, they have now become vulnerable to MLM members seeking to expand their downline. Furthermore, their social media algorithm will respond to these positive interactions with MLM content by showing them similar posts. MLMs exploit pre-existing social relations in order to expand, and a lack of online resistance from community members will work as social proof to normalise MLM activity within the community as individuals seek to conform to changing group standards (Cialdini & Goldstein, 2004). This intervention tackles individuals' perceptions, currently between priming and point-of-purchase stages, perceptions of community norms regarding MLM engagement. This is dependent on information inputs from their environment - in our case, the online space. In particular, “other individuals' public

behaviour, summary information about a group, and institutional signals.” (Tankard & Paluck, 2016, p. 183) Our intervention proposes a campaign that allows individuals to signal public disapproval of MLMs, backed by public safety concerns. It also positions MLMs as outsiders, attempting to cause harm to your in-group. Lastly, this campaign, acting as a public service announcement, will be backed by local reputable organisations, like community governments, providing credibility and authority. Local governments have the incentive to get involved in combating MLMs, as MLM product saturation can both economically and socially devastated communities.

Therefore, our intervention for this layer integrates these insights from psychological theory to propose a social media campaign, backed by community governments. As discussed in the previous intervention, we recommend Instagram as it is a space MLMs frequently occupy and the “sponsored post” feature enables us to target specific demographics (e.g., certain geographic regions, genders, and age groups). The following section will delineate various example posts that can be shared in a bundle on Instagram stories as sponsored posts, disrupting targeted population’s automatic scrolling.

This slide grabs the attention of our target demographic through using a layout which echoes recognizable marketing content with a trendy colour scheme, appealing to those who may fall for MLM posts. For instance, the blue circles look similar to discount icons. After attention is piqued, upon closer inspection, viewers are singled out (“don’t be the ONE”) and asked to reflect on how they may be violating community norms through engaging with an *outside* threat (MLMs).



Figure 4: Example Slide 1 - Provocative

After engaging the viewer with the first slide, this slide launches into a personal narrative extolling the adverse consequences of MLM engagement on an individual's local community. Through this *confessional*, individuals get a glimpse into the guilt they would bear in their hypothetical future if they were to join an MLM. Conversely, it utilises the identifiable victim effect (Lee & Feeley, 2017) to reframe MLM members as victims too, and foster sympathy for *Abby's* initial intentions for joining. Furthermore, this slide links viewers (via swiping up) to community support for ex-MLM members (e.g. *Pink Truth*).



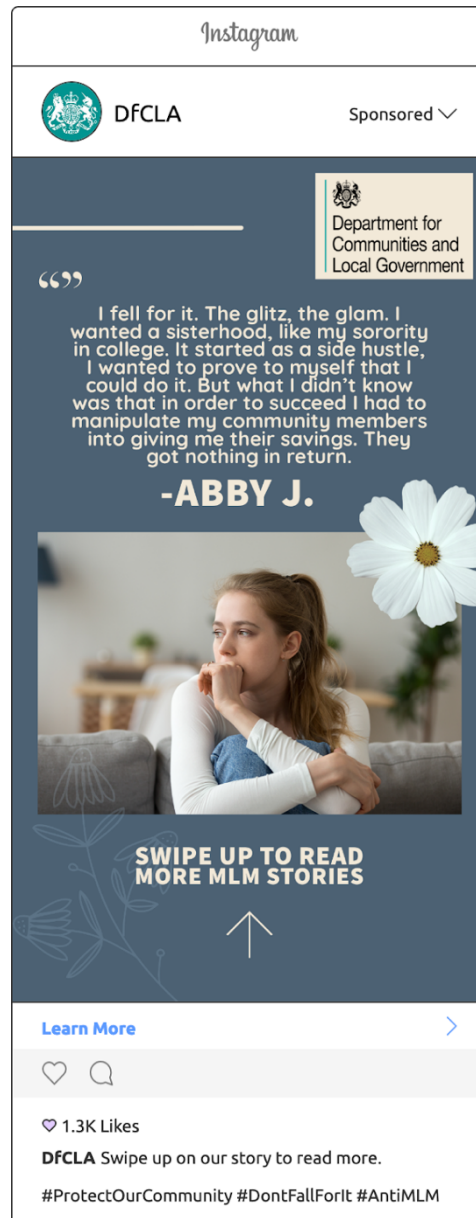


Figure 5: Example Slide 2 - Testimonials

The third example provides summary information about the local government’s assessment of MLMs. As an authority figure, including the organisation’s emblem in the top corner works as an institution signal to instil trust in the message content. Through utilising injunctive norms (“Most people...”), this slide provides information to viewers about how individuals *should* behave within their community (Cialdini & Jacobson, 2021). Finally, the primary function of this slide is that it encourages viewers to share this content on their own social media platforms - disseminating the message to their own personal networks and publicly signalling their endorsement of the message and opposition to MLMs taking root in their community.



Figure 6: Example Slide 3 - Opportunity to Signal Support

### INTERVENTION 3: AI and Banking Alerts

Modern multi-levelled marketing companies adopt an immersive recruitment approach involving a series of interactions that intend to gradually escalate a consumer’s commitment levels (see Figure 2). Hence, before needing to grapple with issues of escalating commitment, it is imperative to minimise such interactions or halt them entirely. This is where our third intervention “AI/Banking Alerts” can be employed.

Defined, Artificial Intelligence (AI) utilises a data-driven approach in which a general-purpose program can examine a given dataset and subsequently derive learnings (Yang et al., 2020). Recent innovations in AI have enabled these “learnings” to: 1. Examine patterns within raw quantitative datasets (Yang et al., 2020), and; 2. Recognise language patterns (Saleh, 2019). Such capabilities not only enable AI algorithms to detect consumer interactions with MLMs, but also serve as an opportunity to create actionable interventions in countering predatory recruitment activity.

### ***Theoretical Grounding***

*How can the addition of AI/Banking Alerts to the social platform interface help reinstall consumer agency?*

Recognising language patterns can help AI algorithms detect the marketing language used to facilitate the consumer’s initial contact with the MLM recruiter. As MLM recruitment markets products to mass audiences within specific demographic affinity groups, the language tactics used tend to become targeted and standardised (Bosley & Knorr, 2018, p. 83). Scholars have identified several marketing techniques that are used by MLMs and fraudulent activities of a similar nature (Pyramid schemes, Ponzi schemes etc.) in which the depiction of “scarcity” is commonly perpetuated. Mitchell et al. (2017) avers that creating a sense of scarcity in “time” is a typical tactic used in altering the perceived attractiveness of a product (p. 178). In commodity theory, this is named the “deadline technique” (Wann et al., 2004, p. 215), under the theoretical grounds that the consumer subconsciously rejects any cognitive processes that allow for extensive elaboration and is forced to rely upon quick decision-making (Brannon & Brock, 2001; Nazlan et al., 2018). “Time” is regarded as an assessment parameter for scarcity (Cialdini, 1984, p. 179), and a paucity of it makes the intended behavioural outcome more of a persuasive option. When exposed to the stimulus of commodity scarcity, Brannon & Brock (2001) found empirical accounts of individuals showcasing extreme attitudinal responses of consumption towards the commodity (denoted as the “focal attribute”), and that participants’ abilities to make logical valuations of a commodity had wavered. Another similar tactic emphasises the elusiveness of the resource itself, which is called the “limited-number” technique. Nazlan et al. (2018) found that limited-number techniques usually resulted in inflated overall perceptions of the commodity itself, and Worchel et al. (1975) hypothesised that this was due to arousals in “reactance” (p. 911). Reactance was noted as one’s cognition feeling threatened by the potential elimination of the product, which results in motivations to restore their “freedom to have the object”. This motivation subsequently creates systemic errors and cognitive biases when evaluating the commodity’s worth (Worchel et al., 1975, p. 911). However, these perceptions are typically false as MLMs hold massive inventories and promote conspicuous consumption as part of their business model. Therefore, AI interventions should look to imbue

consumers with a sense of awareness, with flagging attempts seeking to disrupt cognitive tunnelling and limit the information asymmetry between themselves, the company, and the MLM market. An example of an alert message that a targeted individual can receive is “Beware! [X amount of] people have received the same message as you have within the last 48 hours. Watch out for unsolicited content or malicious scams.” See below:

A supplementary feature for the alert intervention that can bolster its efficacy is to attach a “trustworthiness index rating” between “0” and “5 stars” to accounts that have been verified as sellers. These ratings act as a form of distributed cognition whereby the collective input from the community disseminates information across the target population using the social platform (Lahlou, 2017, p.72). Gauging community approval levels compiles an additional social layer on top of the alert intervention itself, forming a mutually dependent proxy for information between social actors and regulatory authorities (Lahlou, 2017, p.74). In practice, individuals can inform social platforms of scam-like behaviour exhibited by MLMs, whilst regulatory authorities can conduct formal investigations upon MLMs that score below a certain trustworthiness threshold (i.e., 2 or below out of 5 stars).

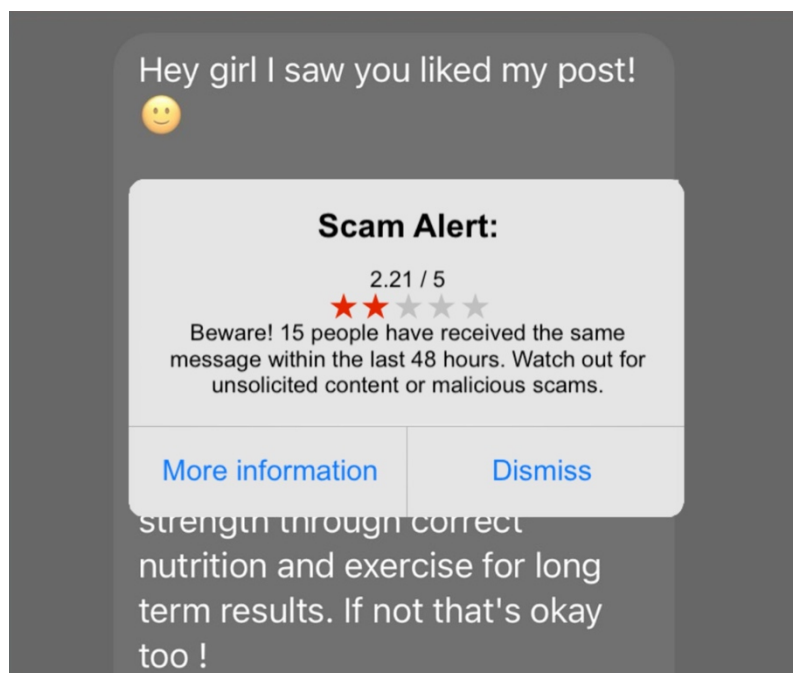


Figure 7: Example alert

Meanwhile, there is robust evidence that AI interventions have the ability to detect patterns in quantitative sums, even ones as complex as MLMs. Pang & Monterola (2017) suggested that MLMs have a “dendritic structure”, where the distribution of income amongst its members is skewed to obey the “80-20” Pareto principle. This means only the top 20% of individuals who are closest to the “root node”, meaning the founding member/top-line management incur profits for themselves (Pang &

Monterola, 2017), whereas lower quadrants of the MLM hierarchy are bound to make far less. By having banks examine organisational balance sheets and auditing MLMs internally for their transactions/compensation to employees, we can gauge whether they are acting in a way that represents financial fraud. Then, upon a consumer's point of contact with MLM recruiters, banks can flag these MLMs and suggest alternative resources (Scamwatch Australia, UK Government MLM/Pyramid Scheme definition etc.) to educate the targeted individual.

The efficacy of using AI/Banking alerts can be justified in several ways. Firstly, using the names of recognised institutions can lend authority and credibility to the intervention (Cialdini, 1984, p. 162). Moreover, whilst flagging preserves a consumer's freedom to choose between engaging or disengaging with an MLM, the alert will ultimately encourage them to think twice before creating any rushed decisions before MLMs have a chance to escalate commitments. Alerts are also capable of promoting availability heuristics meaning that individuals are directly prone to the immediacy of vivid and salient information (Shedler & Manis, 1986, p.26). This results in consumers perceiving MLMs through the lens of the newly received information (in this case– potential fraud), thus, being more cautious about their next set of actions. Finally, an advantage of this intervention is that it can be administered on a macro-scale since regulatory institutions have the power and resources to influence social platforms (Cialdini, 1984, p. 163).

### *Physical Affordances*

Installing AI/Banking alerts engages with the physical affordances layer of installation theory as it seeks to modify direct aspects of the mediating structure (the social platform interface). It builds upon previous scaffolds that were created to report scams by making the thought of “potential fraud” more salient when interacting with suspicious individuals. This inflow of immediately accessible information (AI alerts) encourages the user to reassess the situation, broadening their scope of embodied competencies in its allowance for mental elaboration as opposed to remaining confined by heuristic-based decision-making. In summary, the AI/Banking alerts, in conjunction with the distributed cognition provided by social precedence (in this case, the number of star ratings exhibited by the verified seller's trustworthiness rating), facilitates conscious judgements whilst simultaneously diverting consumers from being funnelled before MLM recruiters have the chance to exert predatory language tactics.

## **LIMITATIONS**

An overarching limitation to our analysis is that we focused only on early stage social media recruiting e. Much of recruiting first originated in physical locations, such as homes (D'Antonio, 2019), whereas the shift in internet culture has now seen the online space for such interactions (Fluegel & King, 2021).

Furthermore, our scope focuses on MLM activity in western cultures, and therefore it is unsure if the proposed interventions can be implemented to the same effect elsewhere.

In Intervention 1, it is important to consider particular factors prior to implementation that people may demonstrate *psychological reactance* (Brehm, 1966) if they feel the game is trying to impose on their free-will to choose the enterprises that they join. Knowles and Linn (2004) say that more reactance is created by “arbitrary, blatant, direct and demanding requests” rather than “legitimate, subtle, indirect and delicate” ones (p. 6), stressing a need to ensure implementation is interpreted as “legitimate”. However, it may be challenging to balance this subtlety with the fact that the inoculation is using an active, game-play intervention and therefore requires direct engagement with it, and could pose as an important trade-off to consider.

Importantly, those administering this inoculation, such as a governmental body, must be those with potential recruits’ best interests in mind and that the power of the intervention does not end up in the hands of those who aim to continue MLM recruitment. Yet, this is unlikely to become problematic given that all of this information regarding persuasion tactics used in MLMs is already publicly available online and thus we are utilising it for a psychologically-proven protection technique as opposed to a guide to manipulative recruitment. However, just as many pyramid schemes have done recently by circumventing tight legal definitions to not qualify technically as such, these companies could review the inoculation intervention and alter their recruitment strategy to become more insidious, essentially *mutating* it so the psychological vaccination no longer works as effectively. Thus, the game must continue to be updated to resemble the most recent recruitment efforts and ensure future players are inoculated too.

Our interventions that seek to modify or interact with social media platforms (ie., social media campaigns and AI Alerts) intend to preserve freedom of choice. Subsequently, this poses the limitation that individuals may choose not to engage with the content (dismissing AI alerts), or can get lost in the ‘flow’ of increasing amounts of possibility in content available (Ytreberg, 2009, p. 472). The level of saturation in media posts may render the campaign to go unnoticed, and individuals may go as far as explicitly blocking campaign content from appearing (Merten, 2020; Thorson & Wells, 2016). Furthermore, susceptibility to confirmation bias may lead collective societies to fall prey to fake news, causing individuals to be highly critical of the information they believe online (Bessi, 2016). Although, given that interventions 2 and 3 seek to be affiliated with community governments and regulatory authorities, this can lend credibility to alerts and ultimately make curated campaigns more persuasive (Cialdini, 1984, p. 163). Lastly, due to this being a deeply-embedded social issue, as a critic of

neoliberalism and a prosperity mindset, a societal and governmental shift is needed for full elimination of MLM activity jeopardising individuals' livelihood.

## **CONCLUSION**

This paper sought to analyse the progression from complete unawareness of MLMs to full membership and heightened escalation of commitment in online spaces. In doing so, we identified key installations which presently channel further engagement. Our objective was to identify pivotal early stages where we might “cut the chain” of commitment, unravelling MLMs dependency on recruitment, rushed purchases, and making them less effective at infiltrating small communities. In doing so, we might protect naive individuals from falling prey to MLM's and wreaking havoc on their finances and social relations. Future avenues of research should seek to address the later stages of MLM involvement. Moreover, there remains a “legal grey-area” that needs to be reinforced in order to prevent fraudulent MLMs from acting under the guise of a legitimate one.

## REFERENCES

- Albert, N., Merunka, D., Valette-Florence, P. (2008). When consumers love their brands: Exploring the concept and its dimensions. *Journal of Business Research*, 61(10), 1062–1075. <https://doi.org/10.1016/j.jbusres.2007.09.014>
- Albrecht, K., & Filip, K. (2021). Weaponizing Rhetoric to Legitimate Regulatory Failures. <https://doi.org/10.21428/cb6ab371.4cffda3d>
- Bagozzi, R. P., Dholakia, U. M., Klein P. L. R. (2007). Antecedents and consequences of online social interactions. *Media Psychology*, 9(1), 77–114. <https://doi.org/10.1080/15213260709336804>
- Barnett, M. D., Moore, J. M., & Harp, A. R. (2017). Who we are and how we feel: Self-discrepancy theory and specific affective states, *Personality and Individual Differences*, 111, 232-237. <https://doi.org/10.1016/j.paid.2017.02.024>
- Bax, C. E. (2010). Entrepreneur Brownie wise: Selling tupperware to America's women in the 1950s. *Journal of women's history*, 22(2), 171-180. <https://doi.org/10.1353/jowh.0.0159>
- Bessi, A. (2016). Personality traits and echo chambers on facebook. *Computers in Human Behavior*, 65, 319–324. <https://doi.org/10.1016/j.chb.2016.08.016>
- Bosley, S., & Knorr, M. (2018). Pyramids, Ponzis and fraud prevention: lessons from a case study. *Journal Of Financial Crime*, 25(1), 81-94. <https://doi.org/10.1108/jfc-10-2016-0062>
- Bosley, S., & McKeage, K. K. (2015). Multilevel Marketing Diffusion and the Risk of Pyramid Scheme Activity: The Case of Fortune Hi-Tech Marketing in Montana. *Journal of Public Policy & Marketing*, 34(1), 84–102. <https://doi.org/10.1509/jppm.13.086>
- Brannon, L., & Brock, T. (2001). Scarcity Claims Elicit Extreme Responding to Persuasive Messages: Role of Cognitive Elaboration. *Personality And Social Psychology Bulletin*, 27(3), 365-375. <https://doi.org/10.1177/0146167201273010>
- Brehm, J. W. (1966). *A theory of psychological reactance*. Academic Press.



Bullingham, L., & Vasconcelos, A. C. (2013). The presentation of the self in the online world: Goffman and the study of online identities, *Journal of Information Science*, 39(1), 101-112. <https://doi.org/10.1177/0165551512470051>

Cahn, P. S. (2006). Building down and Dreaming up: Finding Faith in a Mexican Multilevel Marketer. *American Ethnologist*, 33(1), 126–142. <http://www.jstor.org/stable/3805321>

Cahn, Peter. (2008). Consuming Class: Multilevel Marketers in Neoliberal Mexico. *Cultural Anthropology*. 23. 429 - 452. <http://doi.org/10.1111/j.1548-1360.2008.00014.x>

Casaló, L. V., Flavián, C., Guinalú, M. (2008). Promoting consumer's participation in virtual brand communities: a new paradigm in branding strategy. *Journal of Marketing Communications*. 14(1), 19–36. <https://doi.org/10.1080/13527260701535236>

Cialdini, R. B. (1993). *Influence: Science and practice*. New York: Harper Collins College Publishers.

Cialdini, R. B. (2001). *Influence: Science and Practice*. Allyn & Bacon.

Cialdini, R. B., & Goldstein, N. J. (2004). Social influence: Compliance and conformity. *Annual Review Psychology*, 55, 591-621. <https://doi.org/10.1146/annurev.psych.55.090902.142015>

Cialdini, R., & Jacobson, R. (2021). Influences of social norms on climate change-related behaviors. *Current Opinion in Behavioral Sciences*, 42, 1-8. <https://doi.org/10.1016/j.cobeha.2021.01.005>

Comaroff, J., & Comaroff, J. (2000). Privatizing the Millenium New Protestant Ethics and the Spirits of Capitalism in Africa, and Elsewhere. *Africa Spectrum*, 35(3), 293–312. <http://www.jstor.org/stable/40174855>

Cook, J., Lewandowsky, S., & Ecker, U. K. H. (2017). Neutralizing misinformation through inoculation: Exposing misleading argumentation techniques reduces their influence. *PLOS ONE*, 12(5), e0175799. <https://doi.org/10.1371/journal.pone.0175799>

Coughlan, A. (2012). *FAQs on MLM Companies*. Kellogg.northwestern.edu. Retrieved from [https://www.kellogg.northwestern.edu/faculty/coughlan/htm/PersonalPage\\_Files/Papers/FAQs%20on%20MLM%20Companies%207-30-2012%20FINAL.pdf](https://www.kellogg.northwestern.edu/faculty/coughlan/htm/PersonalPage_Files/Papers/FAQs%20on%20MLM%20Companies%207-30-2012%20FINAL.pdf).

D'Antonio, V. (2019). From Tupperware to Scentsy: The gendered culture of women and direct sales. *Sociology compass*, 13(5), e12692-n/a. <https://doi.org/10.1111/soc4.12692>

de Valck, K., van Bruggen, G. H., & Wierenga, B. (2009). Virtual communities: A marketing perspective. *Decision Support Systems*, 47(3), 185–203. <https://doi.org/10.1016/j.dss.2009.02.008>

Droney, D. (2016). Networking health: multi-level marketing of health products in Ghana. *Anthropology & Medicine*, 23(1), 1–13. <https://doi.org/10.1080/13648470.2015.1057104>

DSA. (2022). Dsa.org. Retrieved 16 January 2022, from [https://www.dsa.org/docs/default-source/research/dsa-industry-overview-fact-sheetd601b69c41746fcd88eaff000002c0f4.pdf?Status=Temp&sfvrsn=6e75d9a5\\_2%27](https://www.dsa.org/docs/default-source/research/dsa-industry-overview-fact-sheetd601b69c41746fcd88eaff000002c0f4.pdf?Status=Temp&sfvrsn=6e75d9a5_2%27).

Emek, Y., Karidi, R., Tennenholtz, M., & Zohar, A. (2011). Mechanisms for multi-level marketing. *Proceedings Of The 12Th ACM Conference On Electronic Commerce - EC '11*. <https://doi.org/10.1145/1993574.1993606>

Feher, K. (2021). Digital identity and the online self: Footprint strategies - An exploratory and comparative research study, *Journal of Information Science*, 47(2), 192-205. <https://doi.org/10.1177/0165551519879702>

FINRA Investor Education Foundation. (2022). *Con Em If You Can*. [conemifyoucan.org](https://www.conemifyoucan.org). <https://www.conemifyoucan.org/ConEmWebGL/index.html>

Fluegel, S., & King, K. (2021). #workfromhome: how multi-level marketers enact and subvert federal language policy for profit. *Language Policy*, 21, 121-154. <https://doi.org/10.1007/s10993-021-09589-x>

FTC. (2021). *Multi-Level Marketing Businesses and Pyramid Schemes*. Consumer Information. Retrieved 17 January 2022, from <https://www.consumer.ftc.gov/articles/multi-level-marketing-businesses-and-pyramid-schemes#pyramid>.

Granovetter, M. (1985). Economic action and social structure: The problem of embeddedness. *The American Journal of Sociology*, 91(3), 481–510. <https://doi.org/10.1086/228311>

Gutzwiller, R., Ferguson-Walter, K., Fugate, S., & Rogers, A. (2018). "Oh, Look, A Butterfly!" A Framework For Distracting Attackers To Improve Cyber Defense. *Proceedings Of The Human Factors And Ergonomics Society Annual Meeting*, 62(1), 272-276. <https://doi.org/10.1177/1541931218621063>

Kahneman, D. (2011). *Thinking, Fast and Slow*. Farrar, Straus and Giroux.

Koltko-Rivera, M. E. (2006). Rediscovering the Later Version of Maslow's Hierarchy of Needs: Self-Transcendence and Opportunities for Theory, Research, and Unification. *Review of General Psychology*, 10(4), 302–317. <https://doi.org/10.1037/1089-2680.10.4.302>

Krige, D. (2012). FIELDS OF DREAMS, FIELDS OF SCHEMES: PONZI FINANCE AND MULTI-LEVEL MARKETING IN SOUTH AFRICA. *Africa*, 82(1), 69–92. <https://doi.org/10.1017/s0001972011000738>

Lahlou, S. (2017) *Installation Theory. The societal construction and regulation of behaviour*. Cambridge: Cambridge University Press.

Lahlou, S. (2018). *Installation Theory: The Societal Construction and Regulation of Behaviour*. Cambridge University Press. <https://doi.org/10.1017/9781316480922>

Lee, S., & Feeley, T. H. (2017). "The identifiable victim effect: A meta-analytic review": Corrigendum. *Social Influence*, 12(2-3), 115. <https://doi.org/10.1080/15534510.2017.1340136>

Merten, L. (2020). Block, Hide of Follow - Personal News Curation Practices on Social Media. *Digital Journalism*, 9(8), 1018 - 1039. <https://doi.org/10.1080/21670811.2020.1829978>

McGuire, W. J. (1961). Resistance to persuasion conferred by active and passive prior refutation of the same and alternative counterarguments. *The Journal of Abnormal and Social Psychology*, 63(2), 326–332. <https://doi.org/10.1037/h0048344>

Mitchell, O., Hammond, B., & Utkus, S. (2017). *Financial decision making and retirement security in an aging world* (1st ed., p. 178). Oxford University Press.

*Money Fraud | Avoiding Scams Game for Kids*. (2021). MoneySense - Natwest. <https://natwest.mymoneysense.com/parents/games-interactives/scam-busters/>

*Multi-Level Marketing Businesses and Pyramid Schemes.* (2021, December 2). Consumer Information. <https://www.consumer.ftc.gov/articles/multi-level-marketing-businesses-and-pyramid-schemes>

Muniz, A. M., O'Guinn, T. C. (2001). Brand community. *Journal of Consumer Research*, 27(4), 412–432. <https://doi.org/10.1086/319618>

Musaraj, S. (2011). TALES FROM ALBARADO: The Materiality of Pyramid Schemes in Postsocialist Albania. *Cultural Anthropology*, 26(1), 84–110. <https://doi.org/10.1111/j.1548-1360.2010.01081.x>

Nat, P., & Keep, W. (2002). Marketing Fraud: An Approach for Differentiating Multilevel Marketing from Pyramid Schemes. *Journal Of Public Policy & Marketing*, 21(1), 139-151. <https://doi.org/10.1509/jppm.21.1.139.17603>

Nazlan, N., Tanford, S., Raab, C., & Choi, C. (2018). The influence of scarcity cues and price bundling on menu item selection. *Journal Of Foodservice Business Research*, 21(4), 420-439. <https://doi.org/10.1080/15378020.2018.1440129>

Ozanne, M., Cueva Navas, A., Mattila, A. S., & Van Hoof, H. B. (2017). An investigation into facebook “liking” behavior an exploratory study. *Social Media + Society*, 3(2), <https://doi.org/10.1177/2056305117706785>

Pang, J., & Monterola, C. (2017). Dendritic growth model of multilevel marketing. *Communications In Nonlinear Science And Numerical Simulation*, 43, 100-110. <https://doi.org/10.1016/j.cnsns.2016.06.030>

Pfau, M., Ivanov, B., Houston, B., Haigh, M., Sims, J., Gilchrist, E., Russell, J., Wigley, S., Eckstein, J., & Richert, N. (2005). Inoculation and Mental Processing: The Instrumental Role of Associative Networks in the Process of Resistance to Counterattitudinal Influence. *Communication Monographs*, 72(4), 414–441. <https://doi.org/10.1080/03637750500322578>

Raacke, J., Bonds-Raacke, J. (2008). MySpace and Facebook: Applying the uses and gratifications theory to exploring friend-networking sites. *Cyberpsychology & Behavior*, 11(2), 169–174. <https://doi.org/10.1089/cpb.2007.0056>

Rege, A. (2009). What’s Love Got to Do with It? Exploring Online Dating Scams and Identity Fraud, *International Journal of Cyber Criminology*, 3(2), 494-512. Retrieved from:

[https://www.researchgate.net/publication/228373590\\_What%27s\\_Love\\_Got\\_to\\_Do\\_with\\_It\\_Exploring\\_Online\\_Dating\\_Scams\\_and\\_Identity\\_Fraud](https://www.researchgate.net/publication/228373590_What%27s_Love_Got_to_Do_with_It_Exploring_Online_Dating_Scams_and_Identity_Fraud)

Roozenbeek, J., & van der Linden, S. (2018). The fake news game: actively inoculating against the risk of misinformation. *Journal of Risk Research*, 22(5), 570–580. <https://doi.org/10.1080/13669877.2018.1443491>

Roozenbeek, J., & van der Linden, S. (2019). Fake news game confers psychological resistance against online misinformation. *Palgrave Communications*, 5(1). <https://doi.org/10.1057/s41599-019-0279-9>

Rusli, H., & Ibrahim, N. (2021). *Exploring the Sentiment and Online Review of Multilevel Marketing (MLM) Company Products*. [Ieomsociety.org](http://www.ieomsociety.org). Retrieved from <http://www.ieomsociety.org/singapore2021/papers/369.pdf>.

Saleh, N. F., Roozenbeek, J., Makki, F. A., McClanahan, W. P., & van der Linden, S. (2021). Active inoculation boosts attitudinal resistance against extremist persuasion techniques: a novel approach towards the prevention of violent extremism. *Behavioural Public Policy*, 1–24. <https://doi.org/10.1017/bpp.2020.60>

Saleh, Z. (2019). *(PDF) Artificial Intelligence Definition, Ethics and Standards*. ResearchGate. Retrieved from [https://www.researchgate.net/publication/332548325\\_Artificial\\_Intelligence\\_Definition\\_Ethics\\_and\\_Standards](https://www.researchgate.net/publication/332548325_Artificial_Intelligence_Definition_Ethics_and_Standards).

Shedler, J., & Manis, M. (1986). Can the availability heuristic explain vividness effects?. *Journal Of Personality And Social Psychology*, 51(1), 26-36. <https://doi.org/10.1037/0022-3514.51.1.26>

Sheng, S., Magnien, B., Kumaraguru, P., Acquisti, A., Cranor, L. F., Hong, J., & Nunge, E. (2007, January). *Anti-Phishing Phil: The Design and Evaluation of a Game That Teaches People Not to Fall for Phish*. 88–99. <https://doi.org/10.1145/1280680.1280692>

Tankard, M. E., & Paluck, E. L. (2016). Norm perception as a vehicle for social change. *Social Issues and Policy Review*, 10(1), 181-211. <https://doi.org/10.1111/sipr.12022>

Taylor, J. (2011). [Ftc.gov](http://www.ftc.gov). Retrieved 17 January 2022, from [https://www.ftc.gov/sites/default/files/documents/public\\_comments/trade-regulation-rule-disclosure-](https://www.ftc.gov/sites/default/files/documents/public_comments/trade-regulation-rule-disclosure-)

requirements-and-prohibitions-concerning-business-opportunities-ftc.r511993-00008%C2%A0/00008-57281.pdf.

Taylor, J. M. (2006, March). *The 5 Red Flags Five Causal and Defining Characteristics of Product-Based Pyramid Schemes, or Recruiting MLM's*. Economic Crime Summit Conference. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.118.4354&rep=rep1&type=pdf> (Revised from text summarized in a white paper for the 2002 Economic Crime Summit Conference (sponsored by the National White Collar Crime Center and Coalition for the Prevention of Economic Crime) – and presented in a Power Point presentation at the Economic Crime Summit Conference in Dallas, August 17, 2004)

Thorson, K., & Wells, C. (2016). Curated Flows: A Framework for Mapping Media Exposure in the Digital Age. *Communication Theory*, 26(3), 309-328. <https://doi:10.1111/comt.12087>

Wann, D., Bayens, C., & Driver, A. (2004). Likelihood of Attending a Sporting Event as a Function of Ticket Scarcity and Team Identification. *Sport Marketing Quarterly*, (13), 209-215. Retrieved 9 May 2022, from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.392.1765&rep=rep1&type=pdf>.

Winter, E. A. (2021). Beckoning “Boss Babes:” Examining Mary Kay’s Online Recruitment Rhetoric. *Ohio Communication Journal*, 59, 49–63. <https://www.ohiocomm.org/wp-content/uploads/2021/06/Winter.pdf>

Woisetschläger, D. M., Hartleb, V., Blut, M. (2008). How to make brand communities work: Antecedents and consequences of consumer participation. *Journal of Relationship Marketing*, 7(3), 237–256. <https://doi.org/10.1080/15332660802409605>

Worchel, S., Lee, J., & Adewole, A. (1975). Effects of supply and demand on ratings of object value. *Journal Of Personality And Social Psychology*, 32(5), 906-914. <https://doi.org/10.1037/0022-3514.32.5.906>

Wrenn, M. V., & Waller, W. (2021). Boss Babes and Predatory Optimism: Neoliberalism, Multi-level Marketing Schemes, and Gender. *Journal of Economic Issues*, 55(2), 423–431. <https://doi.org/10.1080/00213624.2021.1908805>

Yang, X., Liu, W., Zhou, D., Bian, J., & Liu, T. (2020). *Qlib: An AI-oriented Quantitative Investment Platform*. arXiv.org. Retrieved from <https://arxiv.org/abs/2009.11189>.

Ytreberg, E. (2009). Extended liveness and eventfulness in multi-platform reality formats. *New Media & Society*, 11(4), 467–485. <https://doi.org/10.1177/1461444809102955>

Zaglia, M. E. (2013). Branded communities embedded in social networks. *Journal of Business Research*, 66(2-2), 216-223. <https://doi.org/10.1016/j.jbusres.2012.07.015>

## APPENDICES

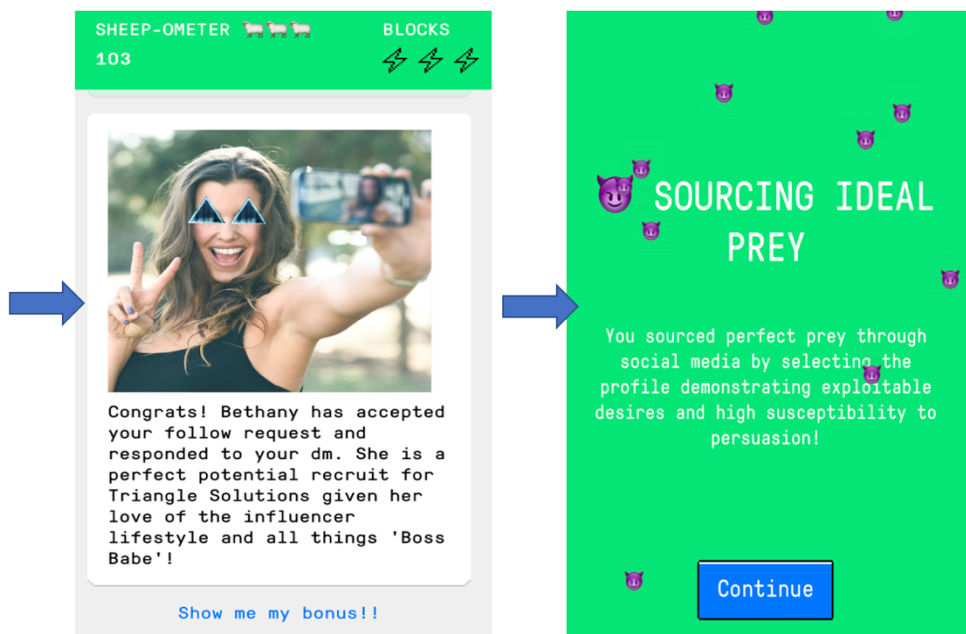
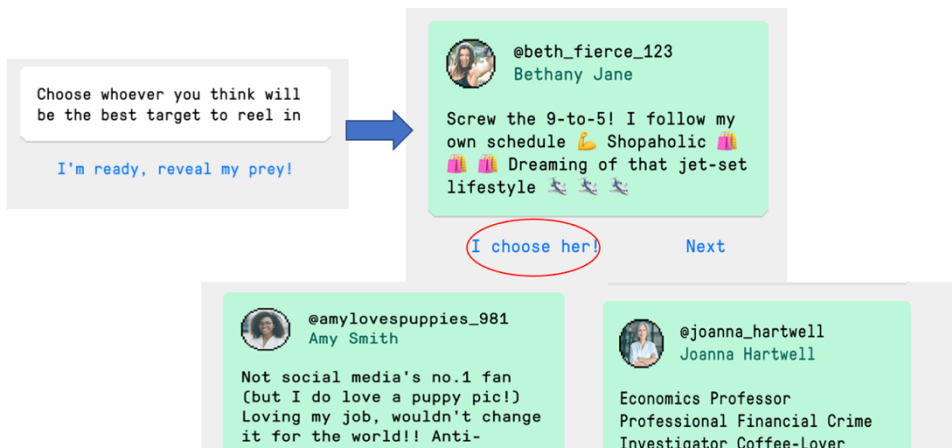
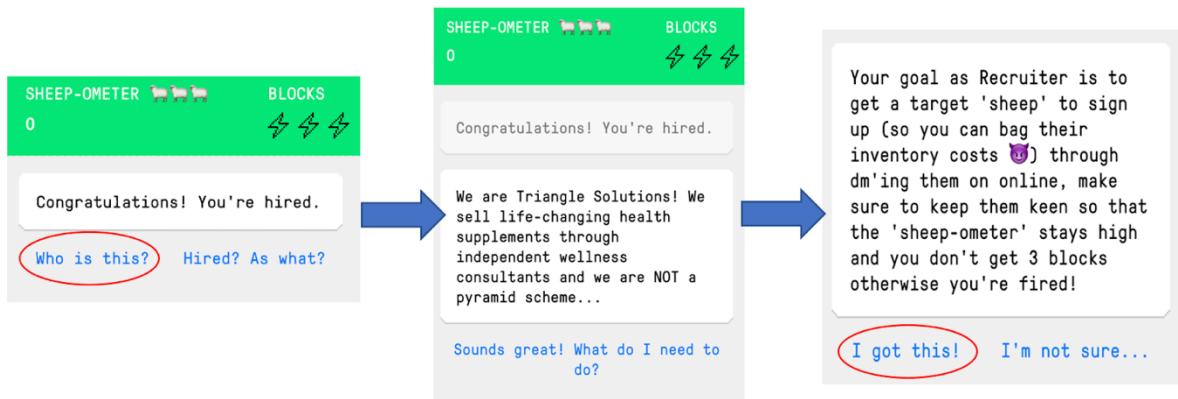
### APPENDIX A: *Specific tactics used in persuasive recruitment appeals by MLMs*

<b>PERSUASION TACTICS USED IN RECRUITMENT BY MLMs: LITERATURE REVIEW</b>
<i>Flattery</i> – making potential recruit feel special, chosen, unique, sought out
<i>Scarcity</i> – limited time offers, limited stock left (plays on ‘hot’ cognition/S1)
<i>Inflated promises of reward</i> – income, perks, lifestyle (asymmetric/masked information on actual probability of this kind of success)
<i>Social proof</i> – consensus from reference groups/recruit’s demographic, case studies/success stories highly marketed

<b><i>Discouraging independent research into the company</i></b> – flat-out rejection of ‘pyramid scheme’ claims
<b><i>Credibility attacks on those opposed</i></b> – haters, negative thinkers (encouraging distancing from these people)
<b><i>Promise of independence</i></b> – self-employed, entrepreneur, ‘be your own (girl) boss’
<b><i>Tapping into personal insecurities</i></b> – belonging, empowerment, ideological alignments, purpose-seeking, agency-regaining
<b><i>Emotive, hyperbolic, grandiose language</i></b> – entanglement with self-development and self-help ethos
<b><i>Unrealistic standards of product/service’s effectiveness and demand</i></b> – ‘miracle cures’, ‘the product sells itself’
<b><i>Emphasis on ease</i></b> – ‘quick cash’ (sometimes mentioned), ‘at-home’, ‘anyone can do it’
<b><i>Reciprocity</i></b> – ‘buttering up’, compelled to return favours and material gifts from recruiter by signing up/joining through them
<b><i>Credibility reiteration</i></b> – ‘successful’ seeming individuals involved (CEO/Founder/upline), celebrity endorsements, gaslighting (‘if this were illegal we wouldn’t exist surely!’/‘we are NOT a pyramid scheme’ narrative)
<b><i>Long-term ‘residual’ earnings</i></b> – passive income, security (for family’s future), wealth creation (as opposed to market volatility with other jobs)

(Sources: Fairclough (1989, p. 207; in Yunus et al., 2016, p. 1234); Taylor (2006, p. 19-20); Bosley & McKeage (2015); Yunus et al. (2016, p. 1238); LaConte (2018); [‘The Truth Behind’ Blog \(2018\)](#); [FTC Website \(2021, para. 11\)](#); Winter, 2021)





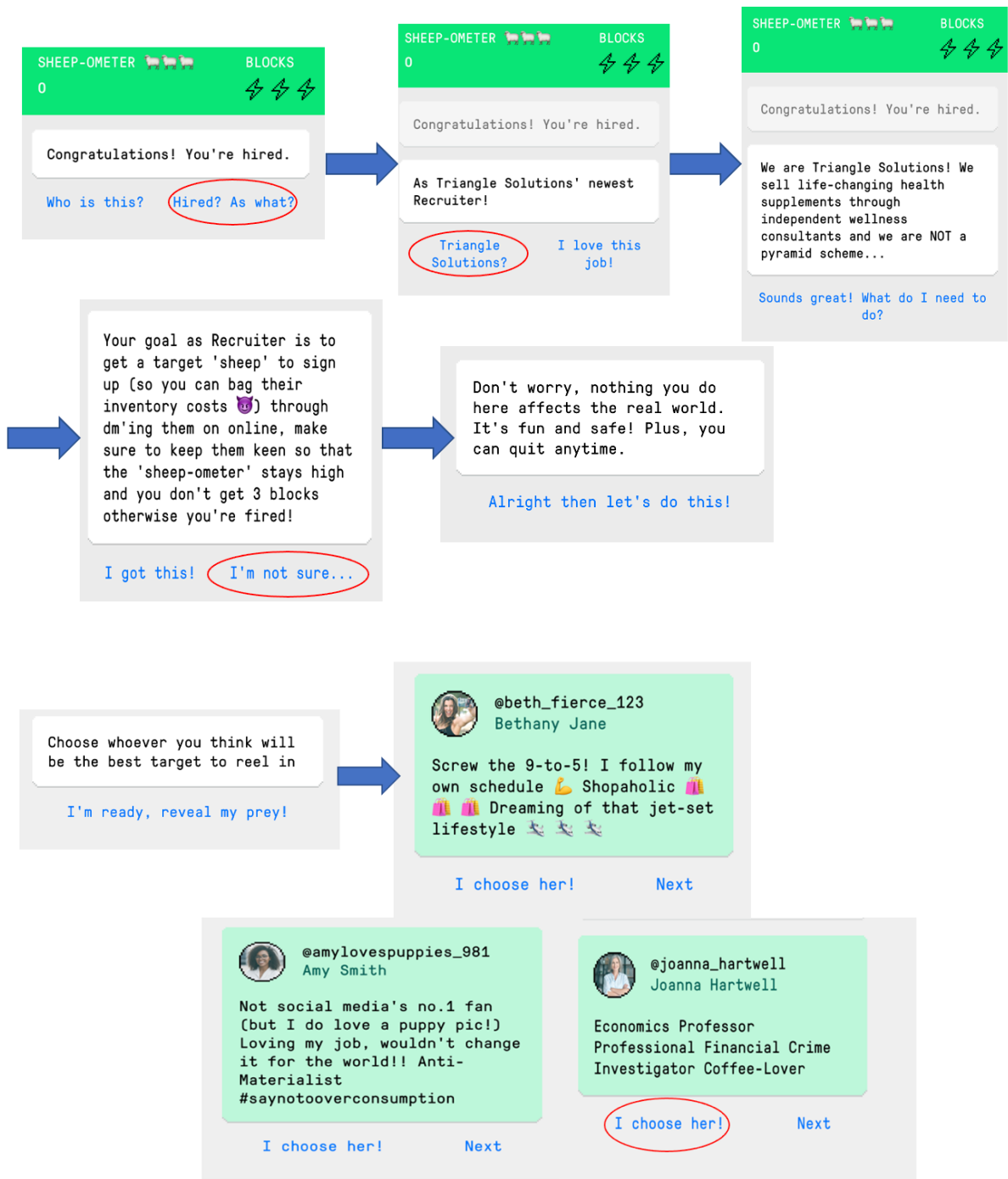
APPENDIX  
*scenario*

C:

*Alternative*

*inoculation*

*game*





APPENDIX D: *Game progression sequence*

### **INTRODUCTION PAGE**

Explanation of character and role are taking on: recruiter for *Triangle Solutions* (MLM selling health supplements), your aim is to recruit a target *sheep* online try to get the highest *sheep-ometer* score you can while not getting 3 blocks, in order to stay in game



### **SOURCING IDEAL PREY BADGE**

Choose target recruit and their network, shown series of profiles and have to choose which is most *preyable* (i.e., correct choice has most desires able to be exploited by recruiter and are most susceptible to persuasion)



### **BUTTERING UP BADGE**

Flattery (correct choice of how to introduce self is most complimentary), gifts/exclusive deals to encourage reciprocity and reference scarcity



### **INFLATED POTENTIAL BADGE**

Earnings, ease, lifestyle, material rewards, level of freedom/agency, self-growth potential, efficacy of product/service, power from managing and mentoring downline



### **SOCIAL TUNNELING BADGE**

Discouraging negative views, isolating from 'haters', credibility emphasis from celebrity endorsers or upline success stories, social proof/consensus from reference group/target's own demographic



### **FINAL PAGE: SUCCESSFUL RECRUITMENT OF SHEEP, SUMMARIES OF TACTICS AND RE-DIRECTIONS**

Emphasise predatory nature of this kind of recruitment and how it misleads individuals and hinders their decision-making, provide overviews of each tactic and re-directions for motivation-fulfilment

APPENDIX E: *Alternative Community Resource Examples*

<b>Higher/new income stream</b>	<b>Sense of belonging</b>	<b>Purpose-seeking in community</b>	<b>Up-skilling</b>	<b>Independence (e.g., self-employment)</b>
Description of no quick cash endeavour as ever sustainable or as good as is made out to be	Parent group chats/forums	Local volunteering initiatives	Free/discounted classes (e.g., photograph, languages)	Coaching/mentoring services
Business courses at local schools/universities	Shared interest groups (e.g., same artist, TV show)	Activity groups (e.g., gardening, walking)	Sports clubs and training	Free online entrepreneurship and leadership courses (e.g., <i>Coursera</i> , <i>Bright Network</i> )
Part-time work/job centre links requiring minimal prior experience and/or no specific qualifications (i.e., low barriers to entry opportunities)	Social mixer events	Local government initiatives	Education workshops	Inspirational literature and talks (e.g., books, <i>TED Talks</i> )